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ABSTRACT

Nurses today are faced with the problem of choosing from a proliferating array of alternatives, both when they decide what type of nursing education to pursue and when they must choose between the many occupational directions they face on graduation from nursing school. Recognizing these recent developments in both education and health, the Southern Regional Education Board Council on Collegiate Education for Nursing recommended the formation of a regional action project. This is the second volume of the project's series. The papers contained in this document include: Components of a Conceptual Framework by Mary Harms; Preparing Future Health Professionals for New Health Care Goals by Calvin B. T. Lee; Reforms in Higher Education: Relevance for Nursing by Lewis B. Mayhew; The Nursing Role in the Health Care System by Virginia Paulson; Nursing in the Relative When by Marlene Kramer; The Future Role of Nurses: A Proposal by Sylvia E. Hart; An Option for Future Nurses: Coordination of Care by Walton Connelly; Our Greatest Need by Georgeen H. DeChow; The Future of Nursing by Shirley Thompson; and selected excerpts from other papers. (Author/PG)

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To Serve The Future Hour

An Anthology on New Directions for Nursing

BARBARA B. REITT, EDITOR

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PATHWAYS TO PRACTICE, Vol. 2

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Nursing Curriculum Project

SOUTHERN REGIONAL EDUCATION BOARD
130 Sixth Street, N.W.
Atlanta, Georgia 30313

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Enough, if something from our hands have power
To live, and act, and serve the future hour.
—William Wordsworth, *The River Duddon*

Preface

Nurses today are faced with the problem of choosing from a proliferating array of alternatives, both when they decide what type of nursing education to pursue and when they must choose between the many occupational directions they face when they graduate from nursing school. Recognizing that recent developments in both education and in health will serve only to accelerate change and increase the number of alternatives facing tomorrow's nurses, the Southern Regional Education Board (SREB) Council on Collegiate Education for Nursing recommended the formation of a regional action project to begin work to improve the curricula in the South's schools of nursing. The project, funded by the W. K. Kellogg Foundation, began its work in the late fall of 1972.

At the heart of the project's goal is the concept of the *system:* it is the hope of the staff and the project's seminar members that a nursing curriculum can be created that will coordinate the total system of nursing education. Such coordination would accomplish two goals. First, it would allow nurses to enter and exit the educational system numerous times during their lives, building a career in such a way that any conflicts between their occupational and private lives are reduced and their returns to school are not marred by unnecessary repetition and credit penalties. Furthermore, a fully coherent system of nursing education would respond more sensitively to changes in the overall health system, allowing schools of nursing to meet society's health needs with the right kinds of nurses in the right numbers at the right times.

This is the second volume of the project's series *Pathways to Practice.* The first volume, *Nursing Education in the South, 1973* (Atlanta: SREB, 1974) brings together educational and health data about the South which form the basis for the project's decisions about the region's nursing education of the future. With this volume we bring the reader forward to a consideration of the basic elements in both education and health care that must be considered by anyone who takes on the task of developing a viable nursing curriculum for the future.

PATRICIA T. HAASE
Project Director

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Introduction

Anyone who has traveled the conference circuit can agree with Donald N. Bigelow, who said, "A conference usually presents a . . . dilemma in that seldom do any intelligent or meaningful documents emerge from it except for the program, which may either be forgotten or carried home like a young lady's invitation to her first dance."* As the staff began to plan the publication of the results of the first meeting of its seminar members, held in Atlanta March 5-9, 1973, we faced first the truth of Mr. Bigelow's remark (made, we might add, as *he* was struggling with the introduction to a conference proceedings!). We could have gotten to press fast, and easily, by simply collecting together the speeches delivered at the meeting along with the question-and-answer exchanges that followed each, and thumbtacking to the front a brief summary sort of statement about the purposes of this project.

However, we wanted to publish something much more substantial than that, and for two reasons. First, the conference was not an isolated event; when we stepped back to look at the meeting in its context, we realized that work that led up to it and work that came afterward were essentially part of the conference too. We wanted to convey to the reader a sense of the continuity between the meeting and events that surrounded it, for only then could a full appreciation of what happened during the meeting be attained. Second, although this project's concern is most immediately with nursing education, our ultimate concern is for the future of health care in our country. The fact that change in nursing education must be a response to changing needs and conditions on the larger front of health care made it imperative that we place the proceedings of our first meeting in their rightful context.

Our plan is to issue a series of publications which together will form a coherent statement. The series will take the reader through the process which the seminar members and the project staff follow as they work to create a curricular structure that will help nurses "to serve the future hour."

We could find no better background for our first conference than Mary Harms' *Development of a Conceptual Framework for a Nursing Curriculum*, an SREB publication that is now out of print but still very much in demand, and with good reason. We asked our participants to read her ideas carefully; the staff has unabashedly borrowed much from her methodology in the development of its own. A coherent presentation of our beginnings could logically have started nowhere else

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*Donald N. Bigelow, ed., *The Liberal Arts and Teacher Education: A Confrontation* (Lincoln: University of Nebraska Press, 1971), p. xix.

but with an excerpt from her monograph. We have therefore used the heart of her paper to form Part I of this anthology and believe that in so doing we have not only provided ourselves with an excellent starting point but done nursing educators a good turn by reissuing a significant portion of her now hard-to-find book.

Part II consists of a selection of the papers delivered to us by some of our guests at that meeting. Two of these people are educators who are not connected primarily with health fields, and two are nurses, leaders in concerted efforts for change and improvement for both the nurse and her client.

Our purpose in inviting such variously occupied persons to speak to us was to inject into our work from the very beginning an awareness of the large number of very complex facts and issues which impinge on our efforts. Nursing is a part of something (the health care system) which is a part of something else (society), and our immediate bailiwick, nursing education, is not only a part of nursing but also a part of the whole educational system, which is also one of the major subsystems in our social system. We knew we could not proceed except with a heightened sensitivity to the various contexts of nursing. Our speakers did a magnificent job of helping us define those contexts.

As the conference came to an end, the staff assigned the seminar members some homework. The fact that they received our request with questions and not with complaint told us we had succeeded in exciting them about the work ahead. We asked them to write a position paper describing their images of a nursing system with all the constraints removed. "What would you want if you could have everything you wanted for the nursing profession?" we asked. Part III is a composite of the opinions of the members of our seminar and a cross-section of the aftermath of their first meeting together.

Here then are the threads with which we began to weave a new cloth. Patterns that can be seen to take shape in this publication will take on sharper definition and clearer hues as we move forward into the detailed work that lies ahead.

PART ONE

This essay is the first half of Mary Harms' Development of a Conceptual Framework for a Nursing Curriculum *(Atlanta: Southern Regional Education Board, 1969), a publication that is now out of print. In the second half of her monograph, Harms discusses specific strategies for curriculum development; because the emphasis in this part of her work is on the individual school and our approach is regional, we have omitted it from this anthology. Her more basic and theoretical first part we considered directly useful for our purposes and thus our use of it here.*

A brief warning about the author's use of terms is in order: some writers use conceptual framework *and* theoretical framework *to mean different things, but Harms in this essay, as her opening sentence shows, uses them interchangeably, intending them to be synonymous. Readers familiar with the more narrow usages of the term* conceptual framework *should not let those definitions confuse them.*

Components of a Conceptual Framework

MARY HARMS

A conceptual or theoretical framework is created for the purpose of enabling faculty to make consistent decisions about the curriculum. It therefore must consist of a series of statements and hypotheses which define its components, state their relationships in such a way as to extend the meanings of the parts, and indicate the principles of organization. These are not absolutes. They evolve in many shapes and in many different degrees of precision. In each individual school of nursing they are created by faculty members on the basis of their collective thinking about (1) the nature of nursing practice and the roles for the kind of nurse the school aims to prepare (technical or semi-professional, professional, or specialist), (2) their students as learners, and (3) the educational institution of which it is a part. If a curriculum is to be kept in tune with the needs of the times and the needs of students, thoughtful consideration must be given to these source components in the determination of a fourth, objectives, and in the determination of the operational framework or design of the curriculum. Decisions in relation to each of these factors are tentative and require testing in the actual situation. Thus, a framework is not built for eternity. It is constructed so that on the basis of its evaluation a better framework can be built in the future. It is a pyramiding task that is never completed. Thus, a conceptual framework springs from experience and must be tested by experience.

SOURCE FACTORS

Definition of Nursing

Much has been written about the uncertainty and confusion centering on the nature and goals of nursing and its practice. In the summer of 1968 a series of articles appeared in *Nursing Research* devoted to theory development in nursing (Berthold, 1968; Brown, 1968; Dickoff and James, 1968; Dickoff, James, and Wiedenback, 1968; Ellis, 1968; Johnson, 1968; Rubin, 1968; *see also* Notter, 1968). One indicated that professional practice, not research alone, must be the source and testing ground of theory. Therefore, if faculty members are to proceed logically and soundly to prepare nurses to offer the services society deems essential tomorrow as well as today, they must critically analyze all facets of nursing practice and then definitively state their views in terms of assumptions and hypotheses. These will form one basis for their decisions about curriculum. These should include more than generalizations about ideas and activities that are readily apparent. They should reflect new insights or ideas and should differentiate between fact and traditionally held beliefs that have not been tested.

This would entail, first, a consideration of the relation of nursing to society and to the health institutions that society has created to serve its needs, since these constitute the environment in which nursing is practiced. Each of these health institutions is related in some way to other societal institutions and has a set of individual purposes and needs that are related to the needs of both their clients and of society as a whole. They provide services in terms of these needs, one of which is nursing services. These services embody work roles, modified from time to time, in view of changing needs of the clients and society.

These work roles, in turn, provide one source of data from which objectives and educational programs are derived or revised. Altered educational objectives, in turn, affect both the educational program and eventually work roles of nursing practice. Thus, the circle of influence continues to spiral. Changes in health care institutions need to be studied if nursing programs are to keep abreast of or in the vanguard of the times and if nurses are to be involved in planning for changes in health services.

Such consideration will then take you into the world of work for analysis of:

1. How is health and illness defined?
2. Who are the recipients of nursing services today?
   Who might they be in the future?
3. What are their needs at the present?
   Will they be different several decades from now?
   If so, in what ways?
4. Where are they to be found today?
   Where may they be found in the future?

If one thinks of recipients rather than of patients, one is forced to extend consideration to other personnel, families, and even things such as the complicated machines that are so much a part of care today. This would raise the question as to the degree to which each school should prepare nurses in each of its programs for services to the various recipients. We have long given lip service to the notion that the nurse should be a collaborator with the physician. If a faculty states that this is the relationship to be achieved, then a rationale must be formulated and decisions made as to whether they can provide the learning experiences that will make its achievement possible. If they conceive the patient recipient to be an individual who has lost sufficient energy, physiological or emotional, that he cannot cope with his needs or situation and the nurse as either the supplier of the energy by virtue of her interventions or as the means by which the patient is enabled to increase his energy, then the concept of the nurse-patient relationship as an open system needs to be developed.

Exploration of where the recipients of care are and hypotheses as to where they will be found in the future is crucial if we are to prepare nurses not only for today but for tomorrow. Papers by K. L. White (1968) and A. Yerby (1968) indicate changes in health care systems which no doubt will change where recipients of care may be found. White also indicated the preparation nurses would need to function in such a system. The mushrooming of extended-care facilities, convalescent hospitals, and nursing homes, both apart from and in connection with proposed health care centers, are evidence of the widening of the locus in which care is being given. Such analyses provide data that faculty can organize and then use in predicting and delineating additional roles nurses may be taking and different competencies that will be needed. They also can be used in the selection of learning experiences for students. They could possibly change the focus of the curriculum.

Additional questions to be explored include:

1. Who will be providing the nursing services for recipients wherever they may be found?
2. What knowledge do they need? At what level?
3. What skills do they need, psychomotor and otherwise? At what level?

The first question forces consideration of activities carried out by the many providers of care all termed "nurses," not just the type prepared in your program. If pursued sufficiently, such study would enable faculty members to better come to grips with what would be the most appropriate functions for the graduates of their particular level of preparation and then enable them to make hypotheses as to the kind of preparation needed to perform the function. This would result in more realistic goals and help solve some of the problems of duplication in programs and of articulation between programs. Master's programs are feeling the pressures from both baccalaureate and doctoral programs; baccalaureate from associate and master's; and associate from baccalaureate and vocational programs.

Consideration of the question "What are the expectancies of consumers of nursing services and of the employers of the graduate of the program?" will provide another dimension to the definition of the roles of nurses. The first part of the question should stimulate thought concerning not only nursing activities or processes but also the consequences of these for the consumer. Plans for care are developed and decisions made as to the interventions needed, but how often are all possible alternatives of action considered, with the consequences of each weighed and their probable value to the welfare of the patient assessed? The latter part of the question would necessitate investigation of work roles, functions, and competencies expected by employers, the possibility of role conflict, and roadblocks to effective care posed by administrative setups. Here consideration would need to be given to the concept of role the faculty members wished to subscribe to and perpetuate—interactive or prescribed. Such analyses could suggest that faculty members provide learning experiences in the educational program which would help the student cope with the realities of the work world, the complexities of the health institutions and their effect on patient care, the expectancies of administration, and assist the student to work with and through other personnel for the solution of problems encountered. One senior student once told me that we had done an excellent job in helping students to recognize when changes are needed and their responsibility for initiating them but that we had done very little to help them know how to go about it. This raises the question as to whether managerial and technological aspects (frequently the expectations of employers) are a part of the nurse's role and, if so, to what degree should they be included in which kind of program—associate, baccalaureate, graduate? It also requires decision as to whether more knowledge and skill in group process will be necessary if nurses are to perform their roles effectively.

Since nursing schools serve and derive their mandate not only from an educational institution created by society but also from the profession they represent, faculty members need to give some thought to their beliefs as to the support that should be provided to the profession through its programs. Is, in fact, one of their functions (through their educational programs) to aid in the definition and goals of the profession and insure its growth and autonomy? Such a commitment could not but be reflected in the curriculum developed. In our school we endeavor to help the students see that they individually and collectively are the profession, that it is not something "off there." We decided the profession needed leaders and a body of knowledge. Therefore, problem-solving and leadership are two strands that permeate the baccalaureate curriculum and research and leadership the graduate programs.

I am not implying that there are any pat answers to these questions, for society and its needs, students, and institutions are changing and will continue to change. Faculty members of your schools no doubt have data on many of these questions, but have they ordered and classified this knowledge? This entails more than mere pigeonholing of facts; it involves organizing and integrating what is known about nursing practice to highlight the gaps in knowledge and provide greater meaning to the practice. Also, have faculty members moved beyond ordering to inference and prediction? They probably have in some areas or partially in all areas, but additional data from as widely varied sources as possible will increase depth and scope of perception. However, it only will be the careful, orderly screening and organization of data by members that will lead to the development of some conclusions and some probabilities which then can be applied to your program and tested for validity. Plato's statement "Nothing ever is but is always becoming" seems most applicable here.

If faculty members conceive nursing as contributing to changes taking place in society rather than merely adapting to changes occurring now or in the future and the nurse as doer who has the motivation, knowledge, and skill to bring about changes in the work setting for the improvement of patient care, then the educational program will need to provide many opportunities for students to be self-directive, to test out ideas in a variety of settings, to work with staff for change, and to challenge commonly accepted ideas about care. The emphasis would probably be more on processes in nursing and in learning than on content *per se*. The degree of skill developed and the locus of operation for the student would depend upon the level and kind of program in which she is enrolled. If faculty members consider the nurse as a "carrier out" of prescribed patterns of care, the objectives, focus, content, organizations, and learning experiences would be quite different. Teaching strategies also would vary. The focus would be much more apt to be on content and the teaching strategies, lecture and/or teacher-directed seminars; less consideration would be given to helping the student to become self-directive.

Such analyses of nursing and nursing roles thus require study and many decisions by faculty members, decisions related to all facets and on many different levels. In addition, if faculty members see the graduates of their programs as decision-makers, they must be in a position to assist students learn about decision-making. The decision-making process is an inherent part of every step in the development of a conceptual framework for a nursing curriculum. Through this process the source factors—the basis for what students will learn and how they learn, and the objectives—and the design factors—content, organization, teaching strategies, and evaluation procedures—will be determined.

Institution

Not only the school involved in the curriculum study but the educational institution in which it functions must be studied. Its overall philosophy, policies, and regulations must be taken into account in making decisions about all factors of the conceptual framework since they influence the kind and quality of the student body for whom the curriculum is being developed and the caliber of faculty involved. The kind of curricular offerings provided, their prerequisites and scheduling, will affect design factors such as content and its organization. For example, it would be futile for a school to hypothesize that learning would be more effective if concepts from the natural sciences were integrated throughout the program if the educational institution does not provide the requisite courses or if scheduling or prerequisites prohibit their utilization. The regulations pertaining to upper and lower division and transfer to and from other institutions also may affect the organization of the curriculum. This is particularly true for baccalaureate programs to which registered nurses are admitted. Therefore, what is effective in one kind of institution may not be possible in another.

Faculty members also need to arrive at consensus as to the role of the school and its responsibilities within the overall educational institution and its responsibility to local, state, national, and international communities, and to the profession. If faculty members agree to commitment in this area they might develop a statement like the following:

> A professional school within a university may be expected by virtue of its location and its faculty to function as a center for research and other scholarly activities. It helps define the purposes and insures the growth and autonomy of the profession, consistent with the requirements and functions of related professions and groups to the end that society's needs and ideals are served. Faculty of the School of Nursing are committed to the idea that there is a direct relationship between the quality of nursing care and well conceived nursing research which will verify and extend the body of nursing knowledge. In view of this commitment, the school accepts primary responsibility for regional activities which contribute to the improvement of

> patient care in the local community and the state to improve care. In so doing, the school intends to contribute both directly and indirectly to nursing on the national and world scene. (UCSF, 1966)*

A commitment to or lack of commitment to improvement of world health, for instance, would be reflected in the presence or absence of such consideration in the curriculum. The degree of commitment to research would influence the degree to which research findings were utilized in teaching and possibly the degree of freedom permitted students to test their ideas.

Students as Learners

The abilities, background, interests, motivations, expectations, and potentials of the particular student body should also be considered data important to the development of a conceptual framework. Students who enter schools of nursing directly from high school differ in maturity, degree of skill, and knowledge attained from those entering with one, two, or four years of college education; therefore, nursing program expectancies need to be geared to these differences. If a student enters a school of nursing expecting to begin caring for patients immediately and actual clinical practice does not begin until the middle of the semester, she will no doubt become disenchanted with nursing and consequently not be very productive. If class presentations repeat materials already learned, she also may become insensitive to new perspectives of the old material. If teaching strategies and curriculum are not such as to stretch the student's thinking, the bright student particularly will become bored and unproductive. Furthermore, faculty members' expectations of the competencies of their graduates should influence the characteristics of the student body through the criteria set for admission. Regardless of the type of program—associate, baccalaureate, or graduate—the characteristics of students are vitally important.

Faculty members' hypotheses as to how students learn will provide a basis for all design factors of the framework—content, its organization, and teaching strategies. For example, a curriculum based on the hypothesis that students learn about nursing care by actively engaging in inquiring, analyzing, synthesizing, and generalizing will require a different kind of organization of content and different teaching strategies than one based on the hypothesis that students learn by listening, looking, reading, note-taking, listing, charting, and summarizing. The end products will also be quite different. The latter hypothesis leads to emphasis on the acquisition of subject information about things, people, and technique and is characterized by evaluation based on how well the "party line" is fed back, thus tending to breed conformity and to stifle creativity. The former hypothesis does not deny the need to provide knowledge—facts, ideas, concepts, principles, and theories—but it does provide opportunity to emphasize the processes through which knowledge is created, communicated, utilized, and evaluated. Knowledge then becomes the means rather than the end. This concept of learning demands that the student not only be exposed to the variety of processes in nursing but that she must understand their nature; she must know where they have been used before, where they might be used in the future, how to use them in different contexts, how to modify them to fit her purposes, and how to assess their results. This, in turn, demands different teaching strategies than the traditional lecture and examination, different roles for students and teacher, and new dimensions in the evaluation not only of courses but also of the total program.

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*This is a composite statement from parts of the total philosophy.

The role assumed by the instructor must not conflict with the decisions made about how students learn. Faculty members need to ask the question: "What kind of role would best fit the intent of this program—(1) a transmitter of facts, ideas, concepts, and procedures; or (2) a transmitter of data perspectives that students are not likely to derive from their own reading and thinking, of the excitement to be gained from investigation of the unknown, and a zest for learning and a zest for nursing?" This same question should be asked in relation to each of the other functions of the instructor. Similar questions may be formulated to clarify faculty thinking concerning the role of the student, the climate conducive to effective learning, and the freedoms to be permitted students.

Faculty members also need to discuss the consequences of their decisions in terms of the teaching strategies required, their competence to fulfil the decisions, and the probability of being able to secure any additional faculty needed. Faculty members who are unwilling to wholeheartedly support decisions that have been made can covertly or overtly sabotage the best-planned program.

All decisions about curriculum content, organization, and teaching strategies carry the assumption that the specific educational experiences that the student has will enable him to deal more effectively with other, future experiences, that is, that they are transferable. Specifically, what kinds of learning experiences must be provided to insure that knowledge acquired by the student will be transferred to the many varied situations encountered by the graduate?

Although there are many differences of opinion as to the way transfer takes place, the following principles may prove helpful:

1. The transfer value of any experience stems from the way in which the information was learned and not from the information *per se*.

2. Desired transfer does not occur automatically; it has to be provided for.

3. The transfer of a behavior pattern to a new situation depends upon the degree to which the student recognizes the new situation as being similar to the previous situation in which the pattern has been appropriate.

J. C. Parker in *Process as Content* recommends that the student "be schooled in the cognitive art of transfer" (Parker and Rubin, 1966). Faculty members need to understand that unless the principles of transfer are built into the curriculum it will not occur.

Objectives—Hypotheses Derived From Other Source Factors

Objectives derived from each of the sources cited should be stated clearly enough and with enough specificity to indicate the focus of the curriculum and to serve as guides for selecting and organizing content, learning experiences, teaching strategies, and evaluation—the design factors of the framework. They are, in essence, hypotheses to be tested through the operation of the curriculum. Evaluation of the curriculum must include testing of each hypothesis made.

Objectives derived from each of the sources are not and should not be mutually exclusive. For example, an objective dealing with the acquisition of nursing knowledge and skill and one dealing with the development of ability to think critically or to problem-solve are complementary and need to supplement each other in setting the sights for the curriculum. Facts and ideas from the sources cited, however, do not provide a balanced set of objectives without carefully thought-through decisions by the faculty as to their selection, interpretation, and priority status. This will, in part, prevent decisions made on prevailing "bandwagons" for the sake of newness only. One example here might be the demands of our technological society for greater stress on technical skill, which could lead to overemphasis on the skill in handling and using the complicated apparatuses now so much a part of the care of the ill. Another might be a change to completely integrated content without relation to a well thought-through rationale and the consequences. One danger of imbalance lies in the selective use of these sources based on specialized orientation of a few very vocal individuals.

The hypotheses should describe the behavior expected and the degree to which it is to be achieved in relation to the context to which the behavior applies. Too often in the past, curricula were based on statements of beliefs so general that they gave no adequate guide for action. Faculty members could read into them their own beliefs and values; consequently, inconsistencies could creep into the curriculum. Dr. Coladarci, who worked with the University of California nursing faculty in the 1950's developing definitions of objectives, has termed such vague statements of objectives as "semantic massage. They look good, they make us feel good to read them but they don't take us anywhere."

Program objectives need to be translated into more specific year objectives and into still more specific course objectives. For example, from a general objective formulates a plan of care—one specific objective that could be derived might be: formulates a plan of care for helping an individual, group, or the profession to mobilize and use resources appropriate to the problem. Still more specific in terms of the competencies to be attained, the statement could be elaborated in the following way:

Defines long- and short-term goals and their relationship to each other;

Determines a range of possible interventions in relation to:
(a) the assets and limitations of the patient, family, health team,
(b) the identified goals of the patient, family, health team,
(c) the potential contributions of related individuals or groups,
(d) projected therapeutic and detrimental consequences and their interrelationships in the three systems of the patient, family, health team;

Identifies priorities of nursing interventions which best accomplish these goals;

Assesses the potential degree of participation and contribution by the patient and related individuals or groups;

Involves the patient, family, and health team (as appropriate) in formulating possible plans to meet long- and short-term goals and provide for continuity of care;

Defines her specific role and/or area of responsibility;

Recognizes the response of patient, family, health team to the plan and alters plan if indicated;

Identifies limitations of her knowledge and continually adds to her repertoire of nursing interventions.

Translating general objectives into specific objectives requires rethinking the meaning of general objectives and selecting a particular emphasis or facet in view of what is logical and appropriate to the level of learning of the student and the course content likely to be included. If this much careful thinking is done, the curriculum is less apt to be a fragmented aggregation of courses with gaps or overlapping of content in some areas.

DESIGN FACTORS

Content

Overall objectives, stated preferably as hypotheses, should lead directly to content. Many different rationales for the selection of content have been described by authors such as Taba (1962), Phenix (1964), and Bloom (1956), each with logic of its own; but what is selected goes back to what faculty members decide are the significant processes and concepts in nursing and what skills are needed as stated in the objectives. Representative ideas and concepts, if selected thoughtfully, provide a kind of map of nursing that keeps one from getting lost in the details. Some questions that could be raised include:

For the processes to be learned, what knowledge is most fundamental and therefore has the greatest applicability?

For the basic concepts decided upon, what facts need to be sampled?

Will these provide for the necessary breadth and depth? A balance where needed?

Does it provide for integration of knowledge from other areas?

Is it appropriate to student needs, interests, and goals?

Is it within the capacity of students to master? What level of mastery is expected?

Organization

If the curriculum is considered a plan for learning, its content and learning experiences need to be organized so that they implement the objectives and apply the decisions made about how students learn. This involves consideration of two dimensions: organization for the learning of content and organization of the content *per se*. Questions that need to be asked are:

What sequence will contribute most to the focus of the curriculum?

Does it provide for vertical continuity for more demanding performance in both long-term and short-term sequences? What are some alternative choices? What strands will permeate the total program? Does the sequence being considered play havoc with student learning?

Does it provide for horizontal integration? For example, of general education content?

Where will content related to specific objectives be introduced, reinforced, and evaluated?

Learning Experiences

Faculty members' beliefs about what students will be like, as stated in their objectives, also will dictate the development of learning experiences, the means for achievement of all other objectives than knowledge. These are some of the critical questions which should be raised:

Does each experience serve multiple objectives? Does each provide for multiple kinds of learning such as inquiry, experimentation, collaboration?

Do they provide for the practice of a variety of behaviors, practicing the requisite skills, for the extension of feelings, attitudes, and values?

Are they arranged in sequential order? Do they proceed from concrete or obvious to the abstract or subtle, from operational thought to generalization?

Are they provided in a variety of settings?

Does the nature and organization of the learning experiences enhance the student's autonomy of thought, independence or inquiry and action, and motivation to seek additional knowledge?

What teaching strategies will be most effective for the achievement of particular objectives? Do you have the competency to utilize them? What kind of climate will enhance learning related to each objective?

What degree of freedom will be given to students and how much and when should limits be set?

EVALUATION

The last step in the development of the conceptual framework is the determination of appropriate methods of evaluation. These depend upon the objectives developed. For example, if a hypothesis is made relative to the students' creativity, then creativity tests need to be found, adapted, or created to meet the needs of the particular program. If the focus is on problem-solving, then this is an area which must be tested. Problems in finding means to evaluate achievement of objectives frequently result from slipshod definitions at the beginning.

APPROACHES TO THE DEVELOPMENT OF A CONCEPTUAL FRAMEWORK

I have described a deductive approach to curriculum development. It can also be approached inductively with experimentation at the grass roots level. This kind of experimentation permits the exploration of: the value of certain content (new and old); problems of balance between scope of coverage and depth of understanding; methods of integrating content materials within a single course and methods of integrating several courses into one; ways of achieving multiple objectives; and the merits of various teaching strategies for the achievement of objectives. Such experimentation is conducted by faculty members in the clinical areas, usually prior to the development of a new framework. The results can be used in considering a new rationale for such problems as content, organization, overall continuity, and feasibility of objectives. A new set of objectives, new organization of content, and new learning experiences can then be assembled. Experts such as Taba (1962) advocate this method of proceeding. I believe that with well-defined source factors and objectives and the willingness of the faculty members to consider and try out new ideas relating to all steps, an effective curriculum can be built using either method.

REFERENCES

Berthold, Jeanne S. Prologue. Symposium on theory development. *Nursing Research* (May-June 1968) 17, No. 3: 196.

Bloom, Benjamin S. *Taxonomy of educational objectives: The cognitive domain.* New York: Longmans Green, 1956.

Brown, Myrtle Irene. Social theory in geriatric nursing research. Symposium on theory development. *Nursing Research* (May-June 1968), 17, No. 3: 213-216.

Dickoff, James, and James, Patricia. Theory of theories: A position paper. Symposium on theory development. *Nursing Research* (May-June 1968) 17, No. 3: 197-203.

Dickoff, James, and James, Patricia. Researching research's role in theory development. Symposium on theory development. *Nursing Research* (May-June 1968) 17, No. 3: 204-205.

Dickoff, James, James, Patricia, and Wiedenback, Ernestine. Theory in a practice discipline, Part 1, Practice-oriented theory. *Nursing Research* (Sept.-Oct. 1968) 17, No. 5: 423.

Ellis, Rosemary. Characteristics of significant theories. Symposium on theory development. *Nursing Research* (May-June 1968) 17, No. 3: 217.

Johnson, Dorothy. Theory in nursing: Borrowed and unique. Symposium on theory development. *Nursing Research* (May-June 1968) 17, No. 3: 206-209.

Notter, Lucille E. Theory development in nursing (editorial). *Nursing Research* (May-June 1968) 17, No. 3: 195.

Parker, J. Cecil, and Rubin, Louis J. *Process as content.* Chicago: Rand McNally, 1966.

Phenix, Phillip H. *Realms of meaning.* New York: McGraw Hill, 1964.

Rubin, Rena. A theory of clinical nursing. Symposium on theory development. *Nursing Research* (May-June 1968) 17, No. 3: 210-212.

Taba, Hilda. *Curriculum development.* New York: Harcourt, Brace, and World, 1962.

University of California, San Francisco. Philosophy of the School of Nursing. Mimeographed, 1966.

White, K. L. Organization and delivery of personal health services. *Millbank Memorial Fund Quarterly,* January 1968.

Yerby, A. Improving the care of the disadvantaged. *American Journal of Nursing,* May 1968.

PART TWO

It is unlikely that any one of the project's seminar members attending our first meeting was ignorant of the complexities the project was facing in taking on the task of rationalizing nursing education. "Rationalizing" in this case means making coherence out of the morass of historical accident that the present array of nursing programs represents and by making the system of nursing education fully responsive to emerging and future health needs in our society. But few if any of these people were prepared for the extent to which their own problems reflect social problems generally and for the intensity of their own and others' feelings when concern about these problems could be openly and fully explored for five days. As our speakers talked of changes in education and health care and of the needs, voids, gaps, the jobs still undone, the question-and-answer sessions and the small discussion groups grew more and more intense. It was not an easy week for most of the participants, but it was a stimulating and eye-opening experience for most.

Four of the papers presented to the group are printed in this anthology in their entirety. These, as well as those papers not collected here, are summarized and placed in the context of the overall meeting in this introduction to Part Two.

The first paper, Dr. Calvin B. T. Lee's, focuses on the year 2000 and was the most future-oriented of all the papers presented during the week. In some ways it was also the most optimistic; Dr. Lee expressed his confidence that "a workable health delivery system to reach all segments of our society can be developed." Professionals who are tangled in the daily frustrations of a health system that at close quarters often seems to be working poorly if at all must find it refreshing to hear people like Dr. Lee, a university chancellor and a concerned, knowledgeable man, express such positive faith in the future. But lurking beneath the surface of Dr. Lee's statements were challenges to educators—from a fellow educator—that can mean nothing less than long hours of arduous work and considerable soul-searching in the years ahead. Perhaps the hardest challenge was the one that is implicit in his reminder to the group that health professionals have too "jealously" guarded their "turfs." He directly challenged the group to "prepare nurses who will be ready to rearrange health care priorities and to assume expanded roles in such a new system." He was in effect telling his audience something it already knew: that educators of nurses must find out how to do something they have always considered essential to do but until now thought well-nigh impossible—to educate nurses for change and to initiate change.

Quite a different estimate of what constitutes the most important goal for nursing education was presented by Dr. Charles Mary, commissioner of health for the state of Louisiana, whose speech is not reproduced in this *anthology. Quite naturally, Dr. Mary's deepest concern was that nursing education meet today's most pressing service needs. His approach was as focused on the present as Dr. Lee's was on the future; Dr. Mary expressed much less concern about our possible inability to meet future demands than about our clear inability to meet some of today's most pressing health needs. He focused attention on topics that are frequently quite disturbing to the nursing profession:*

1. *that confusion prevails among legislators and other public officials about whether or not there are real differences between nursing programs of different lengths.*
2. *that many employers of nurses are showing increasing concern that so many newly graduated nurses need to be retrained to function effectively on the job;*
3. *that increasing government involvement in health care will mean that nursing programs will be under pressure to heighten effectiveness while they hold the line on costs;*
4. *that the nursing profession is ill-prepared to cope with the blurring of the nurse's role with other health workers, a process now well under way;*
5. *that increasing the length of nursing programs and moving them into the university has not been* proven *to raise the quality of nursing care;*
6. *that nursing education is not preparing students for the imminent explosion of opportunities in such fields as industrial, safety, and environmental nursing and in health care administration.*

Dr. Joseph Fordyce, whose talk is also one of those that is not reproduced here in full, reminded the seminar of still other changes confronting nursing education; his focus was on the community college, unarguably a very powerful new force in higher education. Dr. Fordyce described what he feels is the most valuable contribution that can be made by community junior colleges: to provide what he called "career education" and not merely occupational education to their students. Occupational education, he said, is more restricted in its approach and all too often has been "some kind of flim-flam by means of which we can encourage students to take the kinds of jobs that nobody else wants." In contrast to this shoddy approach is career education, which "promotes effective career choice" and "encourages career development through multiple entrances and exits." The mandate for nursing is clear and Dr. Fordyce's comments cut close to the bone for members of this project, one of whose most important tasks is to develop a nursing *curriculum that will avoid doing what so many lower-level nursing programs today do: train people for dead-end jobs that lead nowhere, not even back to school for more education.*

Dr. Fordyce reminded his listeners that community colleges had led higher education generally in the area of open-door admissions and that for the service occupations and professions especially, the "moral and ethical considerations" connected with such a policy need to be examined more fully than they have been so far. He further commented dryly that in light of several new developments "we are all in for some interesting times": nursing educators, along with all educators, must face the fact that competition for students will increase, that the rate of growth in all schools has slowed, even halted, and that educational diversity is increasing. He reminded the group that the proportion of students in higher education who are fresh out of high school is decreasing rapidly and that no curriculum that purports to serve future needs can be designed without consideration of the concepts of life-long or intermittent learning. He summarized his assertions by saying that education must be designed with two facts in mind: people change their minds and society changes the life people lead. Education, he said, "must be facilitating, not habituating."

With Dr. Lewis B. Mayhew's paper, which is included below in its entirety, the seminar turned its attention to other aspects of higher education—reforms in undergraduate programs, professional education, and in graduate programs in the arts and sciences which are relevant to those concerned with the planning of nursing education. Dr. Mayhew reviewed innovations in higher education that nursing cannot and must not ignore; the list is long and quite a heady brew. Little if any of these reforms are neatly or directly applicable to nursing; on the contrary, says Dr. Mayhew, adapting them for nursing education requires first the development of a "curricular design," four models for which he briefly outlines, as well as the careful selection of the processes by which a faculty could undertake such an effort. Dr. Mayhew's short course in curriculum-building, as it were, provided the seminar with a good grasp of the delicacy and difficulty of its upcoming tasks.

Dr. E. Conrad Shackleford, Jr., like Dr. Mary, is a physician working in government at the state level to administer overall health care systems. He too reminded his audience of the realities—not always pleasant—of the health care system. He pointed to a number of trends he believes essential to any consideration of change in nursing education. Foremost among these, he believes, is the "accelerative thrust of technology," which has exaggerated the maldistribution of services and the financial barriers to equal distribution of health care. Another trend Dr. Shackleford considered crucial to nursing education is the increase in specialization in all health *fields; the consequence has been that all health workers, from the physician to the laboratory technician, are ever more dependent on each other and on the system. Modern health care, he said, "cannot be provided without highly sophisticated social and physical and technical systems." One corollary of this interdependence of health workers, he pointed out, is the necessity to demand excellence from each health team member.*

Dr. Shackleford next turned his attention to the issues revolving around health planning. He observed that "we are crisis-oriented," that we have characteristically failed to plan ahead, to attempt comprehensive health planning. He further argued that health professionals have allowed themselves to become so preoccupied with health care delivery as to leave health planning almost entirely in the hands of others. He cited the need for all health workers, with their knowledge that is based on experience, to be "actively engaged in identifying needs and in developing legislation and other proposals to alter the direction of our health care delivery system." He predicted that in any event consumer involvement in health planning will increase, that unions, for example, will provide great impetus for the growth of health maintenance organizations, and that public response to intolerable cost pressures will encourage to growth of ambulatory care centers. Such changes in the delivery system will force nursing educators to make many changes so that new graduates will be prepared to practice in an altered health system.

Our final two papers in Part Two are those prepared for the conference by two women prominent in nursing today. Virginia Paulson highlighted three issues which she sees emerging as high-priority items as the health system evolves: they are "the access to care, the acceptability of the services provided, and the accountability of the providers." She emphasized these points in another way, asserting that nursing must "concentrate on the health and illness care needs of people" and avoid preoccupation with "power politics," with the "status and prestige of nursing." Empirical research is necessary, she said, if we are to have sufficient knowledge on which to build. The "unique areas of the nurse's function for which competencies must be developed" will have to be identified. Moreover, nurses must become much more adept at assessing health organizations and health systems. These, she suggested, are the tools nurses will need to possess if they are to be included with other professionals in the planning of future health care.

Like Dr. Shackleford, Ms. Paulson was emphasizing the need for careful planning for the future. Several orientations—those relating to time, to leadership, to knowledge and skills, to involvement—will need to be changed, and changed with care, if the increasing pressures on nursing and on the overall health system are to be met. "Most educational programs for nursing *are historical accidents and must be redesigned to meet society's needs," she argued. The new design must be based on "beliefs and commitments to a philosophy of patient care and standards of nursing service."*

Marlene Kramer's paper represented a very different approach to many of these same issues, her research itself providing an excellent example of the very kind of empirical work Paulson had called for in her paper. Dr. Kramer has worked extensively in the field, examining the process by which the young person is socialized into the role of the nurse. Full understanding of what happens during this process—revelations of both wanted and unwanted consequences—can provide nursing educators and supervisors with the facts they need to plan viably for the future of nursing. Planners need empirically established facts in order to work out the means to manipulate the process by which the neophyte becomes the nurse so that the undesirable is mitigated if not entirely eliminated and results closer to the ideal can be obtained. Research like Dr. Kramer's will provide educators with new insights into ways they can help nurses bridge the gap between the "positive now" and the "relative when" we all work toward in the health field.

Preparing Future Health Professionals for New Health Care Goals

CALVIN B. T. LEE

Many talk of the health care crisis in American today as though it were simply a matter of cost, of shortages, or of uneven geographical and social distribution of health professionals. Although each of these contributes to the problem, we should also recognize that the fragmentation of the health professions has added to the inefficient management of existing health resources. As cost of health care forces greater recognition of the importance of health maintenance and better utilization of resources, those of us charged with preparing health professionals will have to redesign our educational programs to meet these new goals.

I shall approach my topic, preparing future health professionals for new health care goals, in the same way that I, as a university chancellor, have dealt with other broad curricular concerns. First, I shall speculate about health care in the year 2000. I do so for several reasons: (1) it frees us from the constraints of our present situation, (2) it allows us to establish goals, and (3) the year 2000 is a time when our present students will be at the height of their careers. Second, I shall talk about job mobility, both horizontal and vertical. I am interested in professional expansion because I believe that we often underutilize the talents of university graduates. In addition, I believe that in the future more people will want to change career directions, seek new challenges, greater responsibility, or somewhat different avenues for professional satisfaction. Coincidentally, the complexity of an emerging health delivery system will require the development of new professionals who combine the skills of more than one profession. Finally, I shall make some observations about changes needed in the nursing curriculum.

PREPARING NURSES FOR THE YEAR 2000

To look at present issues creatively, we might imagine what the year 2000 will be like in the field of health. My approach to the future is an optimistic one, one that assumes that man can control his own condition. However, an optimistic view demands that the society ask itself whether things are getting better or worse, and what its members should do about it. A scenario for the year 2000 related to the nursing profession might be as follows:

In the year 2000, everyone—rich and poor, black and white, rural and urban—will be provided adequate health care without inconvenience, without concern about the cost, and with humanity and dignity. Scientific breakthroughs will allow us to prevent or control birth defects, blood diseases, cancer, and heart ailments. In the year 2000 many of the illnesses that concern us today will have been eliminated because of a systematic and large-scale program of health maintenance. The extension of life will be accompanied by programs that assure dignity to the aged. Professional nurses will have equal status on health teams along with physicians, social workers, psychiatrists, among others, each health professional with specific expertise but each with a genuine understanding of some overlapping responsibilities that require collaborative effort. Professional nurses will treat the ordinary ailments and be on the first line of diagnostic physical examinations. In the year 2000, nurses will become health administrators, heads of community health and mental health units, and policy-makers in preventive health programs.

For some, this scenario may have gone too far, and for others, not far enough. My purpose in suggesting such possibilities, however, is not to get into a debate about the specifics. On the other hand, I am suggesting: (1) that a workable health delivery system to reach all segments of our society can be developed, and (2) that new roles and tasks for health professionals will have to be developed in order to bring about comprehensive and complete health care and maintenance.

THE PRESENT STRUCTURE OF THE NURSING PROFESSION

Three assumptions that are implicit in the present structure of the nursing profession have particularly hindered the expansion of the clinical role of the nurse. The first assumption is that the nurse is a dependent rather than independent contributor to health care. Not only is this true in practice, but it can still be seen in the nursing curriculum. Another limiting assumption is that health care relates primarily to acute care rather than health maintenance or disease prevention. This assumption reinforces the hospital model or operating-room status structure of the health profession, which hinders an expansion of the nurse's clinical responsibilities. The third assumption is that a baccalaureate graduate in nursing will remain a nurse pretty much as we know the professional role today. This immediately blocks off new avenues of horizontal mobility, which in my mind requires added administrative or policy-making responsibilities and new combined professional careers within the health professions.

The truth of the matter is that nurses have enjoyed very little opportunity for vertical or horizontal movement within their profession. I define as an expansion of the nurse's clinical responsibility vertical mobility. This should be differentiated from horizontal or lateral mobility, which in my mind requires added administrative or policy-making responsibilities and new combined competencies.

Let us look first at the issue of greater clinical responsibility in nursing, that is, vertical mobility.

VERTICAL MOBILITY IN NURSING—EXPANSION OF THE CLINICAL ROLE

Until now vertical mobility has been defined as the steps between the LPN, the RN, and the B.S. in nursing. Recent literature has suggested a difference between the nurse practitioner and the professional nurse based on the credentials and academic training, separating those with the associate degree from those with the B.S. Operationally, however, there is little room for upward mobility. In the hospital there is the floor nurse, the head nurse, and perhaps the supervisor. Significantly, the mobility upward, such as it is, forces the nurse into more administrative duties rather than greater clinical responsibilities. Yet Irene Palmer gently reminds us that the concept of "extending the scope of nursing practice" is not something altogether new, but that progress has been often slow: "agonizing discussions, multiple caveats, and ultimately educational reforms resulted from decisions to permit the nurse to administer intramuscular injections in the late 1930's, to take the blood-pressure recordings in critical situations in the early 1940's. . . . [It was not that long ago that] intravenous fluids and medications were administered solely by the physicians" (Palmer, 1972).

The economic and political limitations on the rapid expansion of medical school enrollment and the growing demands for health care are so great that nurses inevitably must assume greater responsibility for the primary care of patients. Thus even without changes in the health care system, there is a gap into which nursing must and is being moved.

However, this extended role is finally defined, it is important that we differentiate the *general* expansion of the clinical responsibilities for all baccalaureate nurses from the more specific question of upward mobility. I can foresee the kind of upward mobility for nurses which will bring them to greater responsibility and authority in roles such as: (1) treating ordinary ailments, especially in regions which lack sufficient physicians; (2) being the first line of diagnostic physical examination in order to screen so-called well people in health maintenance programs in hospital, community, clinic, or group practice settings; and (3) being the coordinator of health teams of physicians, social workers, psychiatrists, among possible others, in cases of acute hospital care.

It is beyond the scope of this paper to discuss the specifics of how we will train people for these greatly expanded roles for nursing. Nevertheless, I would express the hope that we not simply think of "add-ons" to the baccalaureate curriculum. More attention should be paid to how expanded competencies and skills can be developed through the working experience.

I do not see this kind of advancement for all baccalaureate nurses, but opportunities for those who are so inclined, motivated, and talented should be afforded. To move toward this greater expansion of the nurse's role, a clear definition of the competencies, skills, experience, and training required must be agreed upon. While I do not foresee this kind of greater clinical responsibility for all baccalaureate nurses, it does have implications for the curricular designs of the four-year programs.

Our universities and schools of nursing must offer educational experiences that are designed to enhance the capacities of individuals to operate as independent and collaborative health workers. There is much too much about professional nursing education which assumes that the most important learnings are related to the nurse's dependent role. Furthermore, nursing education should avoid the tendency of most undergraduate professional education to place too much emphasis on factual learning and not enough on the processes of conceptual thought. Every professional masters substantial information and techniques (know-how), but they are more than technicians precisely because they also have a firm comprehension of a system of ideas, values, and judgments (know why).

In short, the key to the expansion of the nurse's clinical responsibility lies in the number of college or university trained graduates who actually have the broad intellectual and affective competencies a baccalaureate degree is supposed to represent to serve as a base for developing problem-solving abilities, conceptual thinking, judgment, creativity, and receptivity to new ideas.

HORIZONTAL MOBILITY IN NURSING—EXPANSION INTO DIFFERENT ROLES

In reading the literature on this topic, I have been struck by the number of authors who mean by "expanded roles for nurses" exclusively the elevation of professional nurses to the role of physician's assistant. Furthermore, graduate education in nursing is devoted to specialties within the existing structure.

Although training of people in specialized health care problems will continue to be important, we must do something about the lack of horizontal mobility among most health workers. The constraints to horizontal mobility have been brought about by the fragmentation of our training programs, the structure of the professions, the organization of our service agencies and institutions, and licensing rules and procedures. Rather than emphasizing the commonalities among health professionals, we highlight their differences and we go out of our way to separate them into different schools, colleges, and departments. Not surprisingly, the specialization of health workers is also carried over into the organization of health care. Thus, mental health agencies are arbitrarily separated from general public health agencies, and mental retardation is treated as though it is a medical problem while vocational rehabilitation is considered an educational task. Only recently has the recognition of these dysfunctional aspects of specialization caused enlightened health professionals and consumers to devise programs for total care.

We have not paid attention to what might be called hyphenated or hybrid professions which should be developing in the area of health delivery. We in the university have not developed programs which build upon a nurse's training and experience and lead toward newer opportunities in fields such as community mental health, day-care center management, hospital administration, and health policy formation in various local, state, or federal agencies. Rather, we have paid little attention to the real need for transdisciplinary professions and have required such people to start all over again in their education.

At the University of Maryland Baltimore County we are developing a graduate program in policy sciences which will have a component that will be of interest to nurses desiring to move laterally. The core of the program consists of a combination of conceptual and technical tools, that is, methods of theoretical and empirical analysis including, on the introductory level, courses in economic analysis, political analysis, organizational analysis, and statistical analysis, followed by courses in management information systems, decision theory, modeling and simulation, mathematical programming, and planning. By planning the program to fit the student's need, we can build upon a nurse's training and experience and make her uniquely valuable in fields such as hospital and health administration, community health planning, and health policy analysis, to name a few. I also envision programs for experienced nurses in community clinical psychology and social work, among others, which would allow the nurse to take advantage of her training and expertise and bring special insight to community programs. We have barely begun to scratch the surface of these enormous opportunities.

Thus, when we think of education, specifically continuing education for nurses, we should not be confining ourselves only to nursing. We must look at transferable skills and competencies which can be enhanced and developed for different aspects of health delivery.

Despite the professional and often public reticence regarding government intervention in health care, it is almost certain that national health insurance legislation will be passed within the next few years. I believe the simple economics of health care and the sheer impossibility of preparing adequate numbers of health workers to provide universal care of the sort which is only selectively available at the present time will inevitably force the reallocation of health resources into efforts to keep people well. Thus, in the next decades we should see significant sums of money going into health maintenance or distributive care. These health maintenance activities will range from the protective activities to control environmental hazards such as pollution or rodents, to the educational and promotional activities required to educate and socialize individuals toward norms of behavior in the areas of nutrition or family planning, to the social policy planning activities for health-supporting social and institutional patterns of action, for example, regular checkups, prenatal care, or health and occupational safety.

To enhance opportunities for horizontal mobility, we should start by considering the following: We should identify the common knowledge bases. We should give academic credit for acquired experience or a combination of credit by examination and experience or the use of diagnostic tests, particularly in the area of skills, to pinpoint deficiencies so that people do not have to start all over. We should identify the transferable skills and competencies and identify the extent to which these must be enhanced for transferal to another field.

CHANGES NEEDED IN THE NURSING CURRICULUM

We at the universities should admit that, by and large, we have behaved as badly as professional groups have in jealously guarding our turfs. If physicians, social workers, nurses, and hospital administrators have not collaborated in the hospital setting, it should be no surprise—neither have the faculties of the schools which produced these practitioners truly worked together. In spite of all the rhetoric by our nursing faculty or allied health faculty about the need to produce more independent practitioners, we end up responding (or having to respond) to licensing practices which limit our curricular flexibility and to our students' future employers who determine the products they want. We talk of a team approach to health delivery and yet we never bring the future practitioners together in a common setting during the critical training period.

Most nursing courses still assume that the majority of nurses will function primarily in acute care settings. The education of nurses should prepare people for a variety of situations, much less readily defined or clearly delineated than is the case today. This means emphasizing the interrelationships of health and society and the application of scientific methods to solving health problems. "The nursing care of the future will, more and more, require people who can work with broad ranges of uses, engage in extensive data collecting with patients, and fit data into rather complex theoretical propositions about appropriate nursing interventions" (Cleland, 1972, pp. 19-20).

We need also to question the way in which professional nurses acquire their B.S. degrees. Like most other liberal arts students, American pre-nursing majors spend their freshmen and sophomore years taking a smattering of courses in the social sciences and humanities, as well as a fairly heavy concentration of science courses. The latter are considered a necessary prerequisite to the nursing courses they will take in their junior and senior years, while the non-science courses are viewed as part of the broadening experience of a liberal arts education. This means that a person committed to nursing as a career must spend two years in courses without an inkling of how this knowledge is to be applied and then spend another two years mastering the techniques and theories of nursing without much, if any, access to the interdisciplinary insights essential for understanding human health and sickness. On the other hand, the large number of liberal arts students who enter college without the faintest notion of what they want to do are never exposed to the numerous kinds of roles they could fill in the future health care delivery system. In short, the current interface between the liberal arts component and the professional nursing component is minimal.

It seems to me imperative that liberal arts faculties begin to develop core units on the health care delivery system which could be taken at various times in a nurse's education. More and more, economists, political scientists, sociologists, and social psychologists are beginning to develop alternative models for viewing and defining health problems. Yet, I believe, these should not be designed exclusively for nurses, for a fruitful exchange can occur between future nurses and budding political scientists and social workers, for example, which would be mutually beneficial. Students' participation in this process could mean their acquiring unique insights into the health care system at the same time that they are grasping the basic intellectual modes of the disciplines and understanding the relatedness of knowledge. Concurrently, however, nursing faculties should permit students to understand what nursing education is all about long before their third year. Such a system of curriculum organization, easily created by the device of intensive learning modules, should also facilitate the transfer of those hospital diploma school and community college nurses who do have the talent and aspirations to become more professional without removing them from the field altogether.

While it may be true that the power of the physician in the hospital and the power of the medical profession in dictating state practice laws has inhibited the professionalization of nurses, it must be admitted that the attitudes and limited analytic competencies generated by much of nursing education has also played a strong role in preventing the development and acknowledgment of nursing as a profession.

CONCLUSION

What must be defined is the role of nursing in a new model of health delivery and the kind of education necessary to support this new system of health care delivery. Although the community colleges have provided health workers who fulfilled real needs in the existing system, they have not and could not have sought to prepare nurses ready to rearrange health care priorities and to assume expanded roles in such a new system. At the same time that we continue our efforts to meet the critical shortage of nurses, we must plan for new developments and needs. As I see it, nursing education is or ought to be moving in three directions; one is toward expanded clinical roles for baccalaureate degree nurses and development of avenues for upward mobility; another is the development of new administrative coordinating, planning, or policy-making roles; and a third closely related to the other two is toward a greater concern with health maintenance. If these three directions actually are adopted, the nursing profession will become less monolithic and more diversified. The profession will offer greater mobility both vertically and horizontally for those who desire it. To do this, however, will require a reconceptualization of the whole interface areas of the nursing program and other components of the university. While I do not foresee this kind of greater clinical responsibility for all baccalaureate nurses, I also do not minimize the constraints: skepticism (if not cynicism) on the part of the medical profession; a feeling of second-class treatment on the part of the patient; and may be even paranoia within the nursing profession as to when a nurse stops being a nurse and becomes something else. In the longer run, both the consumers and the professions will have to accept a more comprehensive view of the health professionals rather than the present fragmented view.

We must approach these undertakings without becoming subservient to the narrower interests of the diverse constituencies to be served—the profession, the employer, the consumer, and the vested interests of other health professionals—if we are to succeed.

REFERENCES

Cleland, Virginia. Nurse clinicians and nurse specialists: An overview. In *Three Challenges to the Nursing Profession*. Kansas City: American Nursing Association, 1972.

Palmer, Irene. Extending the scope of nursing practice—implications for nursing education. *Current Issues in Nursing Education*, 1972.

Reforms in Higher Education: Relevance for Nursing

LEWIS B. MAYHEW

Catalogues of educational innovation and reform cannot determine how a curriculum in a particular professional field should be fashioned but they can suggest techniques and instrumentalities that can be adapted, given a carefully thought-out curricular rationale. The late 1960's and early 1970's have witnessed a great deal of experimentation and attempts at reform at all levels of higher education. So rich and varied have these attempts been that some have suggested that higher education may be approaching a second curricular revolution comparable in magnitude to that which took place between 1870 and 1910. That was the period which produced numbered course sequences, the unit system for credit, the lecture, the laboratory and seminar modes of instruction, departmental organizational learning, the chain of command involving presidents, deans, and department chairmen, and the elective system of course selection. It may be that the decades of the 1970's and 1980's may be similarly revolutionary and that as the various innovations are attempted and perfected the whole quality of American higher education could be changed. Among the various experiments and innovations that have been attempted in undergraduate programs, professional education, and graduate education in the arts and sciences, some seem to have particular appropriateness for nursing education.

INNOVATIONS IN UNDERGRADUATE EDUCATION

From a number of different undergraduate educational experiments are several innovations judged particularly germane. First, there are serious attempts to allow and encourage students to work quite independently and at rates consonant with their own learning styles. Two radically different approaches have been identified to accomplish this end. There are a number of quite loosely structured ad hoc courses within which students are encouraged to define problems of significance to them, discover procedures, and then to use the instructor, other students, course materials, and resources of an entire institution to fashion their own unique educational experience. A program in science education at MIT is a good example, as it brings together twenty or thirty students and allows them to work for a full year on some science-related problem of their own choosing. Opposite to this lack of structure are those courses consisting of carefully prepared modules and evaluation devices through which students must move in a regular and sequential way. The individual freedom is provided by allowing students to move at their own rates and to receive individualized prescriptions as to how best cope with the next regularly scheduled module of instruction.

Both of these are facilitated through utilization of such technological devices as the computer, video tape recordings, and, increasingly, video tape cassettes. In the freer situations students may phrase problems and then use a computer to examine many different alternative solutions through simulation exercises with the computer. Or, in the more structured situations, student biographical data and results of test performances can be stored in the computer which then scores the subsequent test, relates the results of that to other information, and prescribes new assignments appropriate for different qualities of achievement. The computer in effect monitors student progress and insists that each student undergo specific experiences judged most fruitful for an individual's own growth.

Both attempts—to provide greater student independence and to make optimum use of the technology—require new temporal arrangements for the academic year. The older semester or quarter academic calendar, divided into four or five courses, each meeting at symmetrical periods throughout the term is highly amenable to formal lectures, discussions, and scheduled laboratory work. However, such regularity is antithetical to individualization. The various schemes range from relatively simple modifications such as the creation of interim terms during which students can work at different rates on to dividing academic work into relatively short modules of two or three weeks—modules which can be put together in different patterns, depending on the needs of a particular student. These smaller modules allow for such things as deep student immersion in a course on symbolic logic for a period of three weeks, a period uninterrupted by other demands. Then, after demonstrating competency, the student can shift into a radically different kind of activity. One of the more dramatic examples is the teaching of foreign language through deep immersion at Dartmouth University, whose academic calendar is the three courses in each of three terms pattern. Students spend one-third of their time on foreign language for the first two terms and then are deeply immersed in foreign language (generally in a foreign setting) for the last term. Results produce dramatic growth in language facility.

REFORMS IN PROFESSIONAL EDUCATION

The various field of professional education, including such disparate ones as medicine and law, social work and education, or agriculture and journalism, are currently experimenting with a number of different reforms. The most prevalent is the serious attempt to provide more and better supervised clinical experience much earlier in the student's career than has been true in the past. During most of the twentieth century professional curricula have followed a logic which urged first work in the relevant basic sciences and then work in clinical theory and, finally, clinical experience. The newer theory suggests that some clinical experience should even precede work in basic science as a means of motivating students and giving them a feeling of what professional practice is all about. A rather extreme form of this innovation are the provisions in some medical schools to place freshman medical students in actual clinical settings within six weeks after registration.

Almost as prevalent are the attempts on the part of fields of professional education to make greater use of the insights, information, and theory from the social and behavioral sciences, especially the sciences of society (sociology, anthropology, political science and economics). Through much of the twentieth century, medicine, nursing, and education all drew somewhat heavily from psychology. More recently, however, medical schools, in an effort to teach about complex systems of delivery of health services, have looked to sociology and to anthropology. And law, education, and even theology have sought help for understanding the sociological, economic, and political concomitance of professional practice. This movement has proceeded to such an extent that law schools now appoint sociologists or economists as professors of law and schools of engineering have put together interdisciplinary departments in the social and behavioral sciences for the edification of engineering students.

At the same time, partly in response to student criticisms, partly out of a need to allow earlier specialization and partly to accommodate vast increases in available relevant knowledge, professional schools have begun to allow a great deal more elective choice for students from among the many new courses and fields opening up. For example, legal education has historically been tightly prescribed and operating on the premise that all law graduates should be generally competent in all aspects of the law. In reality, of course, lawyers specialize almost as vigorously as do physicians, but the legal curriculum did not recognize that specialization.

Increasingly the tendency is for professional schools to insist on some prescription, generally in the first year, and then increasingly to allow free election from courses both in the professional school and elsewhere in the university during the latter part of professional training.

Partly as a substitute for the loss of structure which a free elective system produces and partly to attenuate and streamline professional education, there is considerable discussion of new degree structures which allow students to proceed through pre-professional and professional education and to receive appropriate degrees at the end of approximately two-year intervals. While no institution has yet adopted a uniform degree structure, there is considerable discussion of schemes that allow all students to receive the associate of arts degree at the end of the first two years of college, and to receive a bachelor's degree at the end of the second two years, with the work having been taken either in advanced undergraduate courses or in some of the graduate professional fields. At the end of one or two more years all students receive appropriate master's degrees and, at the end of two more years, appropriate terminal or doctoral degrees, whether those be doctor of philosophy, doctor of medicine, or master of fine arts. The theory of this new degree structure is that if there are relatively frequent terminal points, greater facility for branching and for pursuing specialized interests are made possible. Thus, students could take a somewhat common first two years in science and health-related activities culminating in the associate of arts or associate of science degrees, after which point, some could branch into nursing education, some into dental education, some into medical education, and some into a program planned to lead eventually to a research-oriented Ph.D. degree.

CHANGES IN ARTS AND SCIENCES GRADUATE PROGRAMS

Reform and innovation in graduate work in arts and sciences have been much less widespread and much less dramatic than reforms in professional education or in undergraduate education. Nonetheless, several reasonably widespread attempted reforms seem to have some relevance for nursing education.

First, there is some feeling that the value and respectability of the Ph.D. degree should be retained and not diluted by the creation of many different doctoral degrees. At the same time, the doctoral program should be such as realistically to prepare students for any of several different major career emphases. Thus, there is serious search to find ways by which a Ph.D. degree program could be so organized into tracks as to allow some students to gain specific preparation for teaching undergraduate students, others to gain preparation for research careers, still others to gain preparation for more applied work, as for example, applied work in chemistry or psychological counseling. Such tracking means that all students in a given area need to have some work in common, but then the research-oriented student would branch in one direction, whereas the applied student would branch in a different direction. Organizing tracks within a field implies the need for considerably more structure. Historically the Ph.D. degree has been relatively unstructured, with the content decided generally by a student and a major professor with the time for completion of the degree rather indeterminate. That somewhat chaotic system seemed ideal for the research-oriented candidate and it was generally assumed that all Ph.D. candidates were destined for research. However, the person desiring preparation for teaching or for an applied role should conceivably be able to gain the requisite competence in a much shorter period of time and so indeed should the research aspirant.

A second innovation much discussed although much less frequently made operational is the creation of interdisciplinary graduate degrees to prepare people to cope with the highly complicated and interdisciplinary kinds of problems with which they are faced. The argument is that urban problems, the environmental problem, or the problems of poverty transcend the parameters of any single discipline. Yet, they require highly trained, technical people to deal with them. Thus, interdisciplinary programs leading either to a master's degree or a doctor's degree have been seen as the appropriate remedy.

Another reform in higher education is the attempt to find more appropriate means of assessing student performance and ways to insure the student's orderly progression through an academic program, either at the normal rate or at an accelerated rate made possible by academic credit for competency acquired through experiences not prescribed in advance by the school. Thus there is experimentation with competency examinations and with periodic comprehensive examinations, after passing which students can feel rather tranquil in their status as candidates. In graduate programs in arts and sciences there is interest in administering one examination at the end of the first year of graduate work; it would not be comprehensive but would indicate whether or not students can deal with the doctoral work and whether they exhibit deficiencies that can be remedied. Once students have completed this diagnostic examination, they are free to proceed through the rest of their program, being held only for satisfaction of completion of a thesis or applied project and some form of final examination.

In undergraduate colleges there is considerable discussion of competency examinations for specific courses that students may take even without having taken the courses. The various tests of the College Level Placement Tests are being hailed as an important technological device to facilitate this newer form of assessment.

ADAPTING REFORMS FOR NURSING EDUCATION: CURRICULAR MODELS

By reviewing such innovations as these I do not mean to imply that valid curricular change would consist of simple adaption of aggregates of these or similar reforms. Rather, they should be viewed as techniques that can be adapted to a suitable overarching curricular design or rationale. Thus, a step prior to translating any of these innovations into a nursing curriculum is to state and elaborate a curricular design. It would be pleasant if one could conceptualize a two- or three-dimensional model that could indicate the major parameters of a professional curriculum. Unfortunately education for the professions is far more complicated than to be adaptable to any single curricular model; hence, several different models should be examined and, in the final analysis, superimposed on each other so that the resultant curriculum reflected elements of each one. While a considerable variety of models can be imagined, at least four are relevant and adaptable to nursing education.

The first of these visualizes that there are four major components of a curriculum, each requiring approximately a fourth of the student's time in a specific program. The first fourth would consist of those courses and experiences judged necessary as a common or basic education for all students in a particular program. For the undergraduate curriculum, these common learnings would generally be those courses thought of as general education; for a number of professional fields of which the first professional degree is the master's degree (such as nursing, engineering, or business), the common learnings would be the general education component or completely graduate professional programs. There would still be need for the common component, but it would likely be more related to the actual field or professional field of specialization. At the opposite end of this curricular spectrum would be the fourth of the student's work which would compose the major, or those courses directly germane to professional practice. In engineering these would include courses in design, materials testing, and the like; in business, accounting and tax law; in education, courses on pedagogy; and in nursing, on courses dealing with surgical techniques or other specifically professional work. Those courses, however, would not be offered in a vacuum but would rather be taken in a context of appropriate theoretical or basic science courses. Thus, a third quarter of the student's program would consist of those courses which could provide a needed theoretical or basic science context. For engineering they would clearly be mathematics, physics, and chemistry, while for nursing they would be biological, social, and behavioral sciences. The last fourth of the program would consist of elective courses designed to broaden or liberalize the entire curriculum. Students would be able to take elective courses to complete this component either within the professional school or outside. It would be especially important to insure that students did not abuse the elective component by simply concentrating still further in their field of specialization.

A second model consists of lists of competencies which all graduates from a particular educational program should possess. Such a list can be a relatively long one and can be subdivided into categories such as has been done by Benjamin S. Bloom and associates in *A Taxonomy of Educational Objectives: Cognitive Domain* (1956) or David Krathwohl and associates, *A Taxonomy of Educational Objectives: Affective Domain* (1956). However, for purposes of overall curricular planning, a somewhat parsimonious list of competencies would probably be most appropriate. The following is an example of a list a professional faculty could either elaborate itself or prepare after a more systematic examination of what things the professional practitioner actually does.

1. To write reports and instructions with minimum ambiguity.
2. To work cooperatively with others who are superior, equal, and inferior in status to accomplish desirable health procedures.
3. To read and interpret complex instructions.
4. To do competently a variety of basic nursing procedures.
5. To be able to join a complex bureaucratic structure and be able to identify reliable sources of various kinds of information.
6. To demonstrate competency in a variety of specialized nursing procedures.
7. To be able to identify various levels of needed medical procedures and to make appropriate referrals.

Related to such a list of competencies is still a third way of viewing a curriculum: to indicate the range of experiences which are most likely to develop needed competencies, attitudes, and values. Such a list is in a sense the pedagogical side of the list of competencies and will generally imply appropriate learning experiences. Without in any sense being definitive, the following list of experiences would seem to the layman as being desirable in the education of professional nurses.

1. To experience a range of health problems and a range of kinds of individuals experiencing those health problems.
2. To work intensively and alone on reasonably complicated health procedure problems.

3. To work intensively with a group.

4. To experience different cultural and subcultural attitudes toward health, disease, and medical services and procedures.

5. To experience complicated requirements for both written and oral communication.

6. To come intimately into contact with the variety of subcultures making up a hospital or other bureaucratized institution for health care.

7. To experience at first hand conflicting role expectations.

8. To witness a range of effective techniques for dealing with health problems but which are different depending upon the particular practitioner.

A fourth way of viewing the curriculum really consists of two parts. The first is based on the premise that within the practice of nursing there are a variety of ways of knowing something. And the practitioner should be exposed to that full range and should be taught to understand the capabilities and limitations of each. This argues that the kind of knowing which comes from reading an electrocardiogram is different from the kind of knowing which an x-ray allows. These, in turn, are different from the knowledge which can be derived from a written report, which in turn is different from the kind of knowledge one can derive from statistical quantification of many examples of a given phenomenon. Moreover, a different sort of knowledge can be acquired almost intuitively from talking with an individual, while still a different knowledge can come from self-awareness and sensitivity to group dynamics. Stated more abstractly, the nursing curriculum should include experiences with the rawest kind of empirical evidence at one end of a continuum and experience with almost intuitive perception at the other. This is not to suggest that there should be a formal course on the nature and validity of professional knowledge. Rather, it suggests that the total curriculum should be contrived so as to insure that every student is exposed to all the ways of knowing that are necessary to the professional practice of nursing.

ADAPTING REFORMS FOR NURSING EDUCATION: TECHNIQUES

Presumably each of the selected innovations should or could suggest adaptation for professional nursing. Presumably also, those competent in nursing education should be able to assign substance to each of the four curricular models suggested. But perhaps it may be well to suggest several processes that a faculty could use to assign substantive meaning to curricular models. The first of these is the need to make reasonably detailed task analyses of what various kinds of nursing practitioners actually do. The prototype for such an exercise is the classic diary study of American women conducted by W. W. Charters in the 1920's (1930) and which became the basis for the curriculum at Stephens College, Columbia, Missouri. Charters asked several hundred college-educated women to keep detailed diaries of what they did. The items from those diaries, when classified, provided a basis for a nine-element curriculum. A faculty might very well ask nurses to keep diaries, ask participant observers to observe nurses in practice, ask nursing supervisors what people did, ask doctors to describe nursing activities, and to make use of such data-collection devices as the critical incident technique. This last consists of asking people presumed to know to describe practices judged as effective and other practices judged ineffective. From the total accumulation of this sort of information there should be the raw material out of which could be fashioned a realistic curriculum.

But simply accumulating statements of activities is insufficient. Curriculum building requires imagination and creativity to assign form and meaning to a total curricular structure. A faculty, undertaking a curricular effort, should thus engage in a great deal of model-building, including creating utopian models of curricula to serve as guidelines for what eventually will be adopted. This point is stressed, because so many faculty members seem unwilling to be so presumptuous as to suggest a total ideal curricular structure. One device which has proven useful is to ask each member of a faculty to study a school's catalogue and for the moment to play God, excising elements judged inappropriate and creating a kind of divine design. Rest assured, one's colleagues will not allow the vision of any single faculty member to prevail. But the very exercise of thinking ideally helps people to conceptualize a curriculum and moves their curricular thinking away from simple imitation or equally simple accretion of the individual interests of all members of the faculty.

Such activities require an inordinate amount of time. Generally faculty members have been unwilling or unable to spend the long hours of discussion and analysis of data necessary to produce a curriculum which will meet the needs of students and utilize the resources of an institution and its faculty. Any institution seriously wishing to make substantial changes in a curriculum should allow involved faculty members to spend many days and weeks together talking out curricular issues. Only as the group spends enough time to reach consensus is the resultant pattern likely to be satisfying. This technique has been well illustrated at Stanford, which recently created thirteen highly interrelated and successful courses for a program in international relations. This program could come about only because a group of senior faculty were employed for one full summer to talk with each other about interdisciplinary programs and to become sufficiently interested first to develop a concept, and then to be willing to offer the needed course work and experience. The curriculum, regardless of level of education, is the most expensive part of formal education. Yet, evidence abounds that the curriculum *per se* is not highly regarded as a substantial educational influence. One can speculate with reason that a primary cause for ineffective curricular expression is the failure of faculty to devote sustained attention to planning the curriculum. During the 1940's and 1950's undergraduate institutions across the country adopted programs of general education. Some were successful and some highly unsuccessful. In retrospect it would appear that the unsuccessful programs were those put together casually with little faculty discussion and with lists of requirements being simply those which individual faculty members listed in quickly prepared memoranda. Those institutions which produced significant programs of general education, such as was true at Harvard, the College of the University of Chicago, Michigan State University, or Stephens College, were those institutions which provided ample time for faculty curricular exploration.

REFERENCES

Bloom, Benjamin S., *et al. A taxonomy of educational objectives: Cognitive domain.* New York: Longmans, Green, 1956.

Charters, W. W. Engineering the curriculum. Unpublished manuscript, *circa* 1930.

Krathwohl, David. *A taxonomy of educational objectives: Affective domain.* New York: David McKay, 1956.

The Nursing Role in the Health Care System

VIRGINIA PAULSON

The nurse of the future will work with individual patients on the basis of a greater understanding of the person. The future nurse will work from a scientific data base that will be more dependable and more precise, and the science of nursing care will be well developed. Nurses can be expected to implement what they know with greater sensitivity and skill. In the light of these advances, what is nursing willing to be accountable for in the health care delivery system of tomorrow?

The health and illness care system is changing, and there is still opportunity to influence the direction of that change. Because many of the decision-makers are in apparent disagreement, time may be on nursing's side. If nursing could reach the right people at the right time with the right message, there might be opportunity to influence the system design. The people would not be hard to locate, the time could be set aside, but who has the message?

As a basis for its study of directions for medical education, the Carnegie Commission (1970, pp. 31-33) cited areas of change in the health system. There seems to be general consensus on at least some of these. For example, the growth of prepaid group practices and the continuing rise in the use of community ambulatory care settings of a wide variety of services by the public appear to be well-established trends that will continue to shape the future.

The rate of acquisition of new knowledge and technology is having great impact on the planning of facilities, services, and education. The computer has been around for some time now, but the full impact of everyday use of this technology is yet to be realized. New therapeutic techniques, requiring new skills and probably new personnel, will of course be discovered. New knowledge and adaptable technology will so enhance the capacity for diagnosing and determining therapies for acute illness that it is generally accepted there will be a shift of concern to the prevention, diagnosis, and treatment of degenerative diseases and mental illness.

Acceptance of a broad and strong role by government in shaping the system would give credence to the shift to viewing health as a public utility. Society appears to be affirming that governmental role. The Commission believes that education, service, and research will become more effectively oriented to a system of health care delivery.

The issues in the developing system continue to be: the access to care, the acceptability of the services provided, and the accountability of the providers.

Accountability for meeting the health and illness care needs of society has been less than explicit.

> If the solution to the provision of health care services were to be found in the sheer numbers of very talented people working on such solutions, then certainly the problems should have been solved by now. If the solution to the health crisis could be found in the deep concern for the problems held by all those who work in health or work to determine how services will be financed, the crisis would be over. If the solution to implementing "health care is a right" was discovered in the growing public involvement in decision-making about the health care system then this would be the healthiest of nations.
>
> There are a multitude of talented people working on solutions. Persons from all disciplines are deeply concerned. The public does believe that health care is a right and are involved. But the problems are not solved. The crisis is not over. This is not the healthiest of all nations. (Paulson, 1972.)

George Pierson (1973) asks if the university which is shifting its focus to a managed enterprise is moving from equality of opportunity to equality of output. I suggest that we keep that question in mind as we consider the educational preparation of the nurse for the future.

As we remodel nursing and as we determine strategies for nursing to influence the design of the evolving health system, we must concentrate on the health and illness care needs of people and stop doing self-service to nursing. There is evidence that society is asking for humane and relevant care. The system must be opened so there are multiple entry points for everyone.

There are fundamental problems for nursing to deal with if it is to participate as system architects. Aydelotte (1972) reminds us that society has allocated resources over a number of years to prepare nurses for tasks society has sanctioned: assessing patients' wants and needs, designing and executing care practices to meet those needs, and instructing patients and others in the maintenance of health and the avoidance of illness.

But within much of nursing there is a lack of knowledge about the scope and dimensions of health care delivery. An even more serious problem has been the overriding preoccupation with power politics among some of those in leadership positions; these leaders are too concerned with the status and prestige of nursing and with the need to control programs, people, and decisions. Moreover, there is too much clamor that nursing is not recognized but too little concern as to whether nursing has earned recognition.

As we deliberate in this seminar on the future of nursing education let us identify some of the unique areas of the nurse's function for which competencies must be developed. We are hindered always in planning for the future when we do not have the fundamental empirical data on which to build. However, we must use what is now known and guess a little, so that we can also use what is being developed through research.

Research in the social sciences, as pointed out by Leininger (1973), must be used to reassess health organizations and health systems. The public objections to depersonalized care, fragmented care, and the non-system are symptoms of psychosocial pathology. Research in nursing must be encouraged to elicit those components which are specific functions of the practicing nurse. Broad areas of functioning in the nurse's role might be described with these words: the sustaining function, the compensatory function, and the stress-relief function. Within these broad areas one might suggest that some of the components are comfort, support, nurturance, and concern. These occur in a humanistic framework and a care model. We need beginning definitions and research into the science of these functions and components. But who would deny they exist? Can they not be utilized in the educational process as we probe deeper into their meaning?

If you accept the fact that the nurse has as one of the areas of function the need to compensate for the patient, to breathe for him, infuse nourishment, bypass musculature to void for him, then can we not teach these skills expertly with deliberate placement in the curriculum?

Changes in the present role of the nurse to facilitate the future role will be best accomplished through planned transition. There are several orientations that I believe need to be explored for their usefulness in this transition and that could be implemented in our health service agencies now with the help and support of the educational community.

TIME ORIENTATION

The first of these is time orientation. Nurses in many employment situations are socialized to an eight-hour shift and day-by-day assignments. The nurse spends little time with developing long-range objectives for herself, the unit, or the district where she works, or with and for patients, unless there is an expectation that this activity occur. Students can be helped to learn that developing goals and objectives of a long-range nature assist in the maturation and development of the professional service role. Reinforcement in the work situation of the planning function should help.

Effective utilization of resources in planning a patient care program takes time if it is to meet the perceived and expressed needs of patients. To maximize the professional skills of nurses there needs to be an explicit and deliberate plan over time to provide continuity of care for patients, and nurses need to be prepared to carry out such plans.

LEADERSHIP ORIENTATION

Leadership orientation is an important aspect of the changing role. The leadership of skilled professionals will be enhanced through the provision of an administrative organizational structure based on a conceptual framework of facilitation. The nurse must be willing to leave the clerical activities to clerks and housekeeping activities to those employed for those activities. The professional nurse must be willing to demonstrate competence in assessing the needs of patients for nursing care and assisting the staff in implementing a plan of individualized and personalized care.

Competence requires more discipline, more energy, and more know-how than ever before. Service settings have an increased need for committed professionals who are bright, creative risk-takers. The pressures on complex settings caught in rapid transition are excruciating, demanding much talent. Competence must include a compassionate interest in the patient and for his life condition. We must discover a way of operating within the existing structures which enables and encourages the health professionals to work toward relevant and humane services. We must also discover ways of implementing change in structure if that is what is required.

KNOWLEDGE AND SKILLS ORIENTATION

From intimate acquaintance with hour schedules, vacation schedules, assignment sheets, and requisitions, the professional nurse of the future must demonstrate increased ability to assess the needs of groups of persons as well as individual clients. A recognition and embracement of the knowledge needed to work with groups of culturally unique persons is essential if health systems are to meet the present criticisms of the public. Many nurses today stand firmly on the side of the care expert model. They use words such as comfort, support, and concern. If we can find the way to say "You're right—hold on," it won't be too long before the research on these measures will legitimize these words and theory will be translated into action. We will no longer need to wonder if what we do for patients really matters.

No other service profession has created an organizational structure designed to remove the most competent practitioners away from the recipients of that professional service as skillfully as institutional nursing. This design must be reversed. Standards of nursing care, nursing practice based on sound research, and evaluation measures must be developed and utilized in order that nursing demonstrate its willingness to be held accountable. Skills and knowledge will move nursing toward direct clinical care roles with people. Both depth and scope of knowledge will be essential. Skills must be taught so that the nurse as a care expert is visible to the patient.

INVOLVEMENT ORIENTATION

If patient care is to reach a level of excellence which can be assured, then each nurse who cares will need to become involved in system design based on the patient imperative. The nurse will need to be involved in determining patterns and protocols of care. The nurse will need to be helped to learn how to function as a change agent. The socialization of nurses into leadership must be a deliberate activity based on studies which determine the "rites of passage." Redistribution of power can occur, the social scientists say, through a variety of strategies all based on modalities of involvement. Some of these are revolt, re-education, confrontation, conflict resolution, etc. Involvement by the nurse in accomplishing objectives and the purposes of the institutional endeavor for patients and the public is an obligation as well as an opportunity.

The contributions of the nurse to total operational planning will be accepted to the degree that the competencies of the nurse are redirected to nursing practice and the management of nursing care services. Involvement with persons in other disciplines will move toward colleague relationships as the ability to demonstrate care expertise increases. Involvement with co-professionals, whatever the setting, will be enhanced as the process of dialogue is studied and understood. True collaboration is based on the working through of attitudes, role perceptions, and goal differences and similarities in order that trust and respect can evolve.

Historical forces which influence the scope of practice of any profession include (1) the knowledge and developing wisdom through research undergirding a profession, (2) the changing definitions of social, economic, and health problems and the needed skills to deal with them, and (3) the unresolved problems of ambiguity and overlapping functions between related professional and occupational groups. The application of these to nursing make acceptance of the status quo untenable. Changes will occur. Nursing is obligated to stop watching and start participating, that the public might be served. As much as we need creativity, we must remind ourselves that it is relatively easy to be creative in the abstract and infinitely more difficult to be innovators in the real world. The really scarce people are those who have the know-how, energy, daring, and staying power to implement change and new ideas (Levitt, 1963).

Revolution in health care is underway. Changes in the nurse's role that are evolving rapidly are:

1. Nurses have increased responsibility in the care of individuals who are critically ill, e.g., organ transplants, implants, etc.

2. Nurses have increasing responsibilities of leadership of health teams in community settings.

3. Nurses recognize the need to develop skills and team technology to deliver care at lower costs.

4. Nurses are mobilizing resources directed toward family health maintenance and evaluation of level of wellness.

5. Nurses need to be aggressively involved in assuring the accessibility of nursing care as well as other health care for the public.

6. Nurses are coming to an agreement that the delineation of "professional" and "technical" practice are inadequate designations. Rather, there will be a variety of types of specialization at different skill levels defined by the demands and scope of patient care which are required.

7. Nurses will define administratively the way in which nursing practice is organized to assure that direct care of patients is accomplished.

I believe that it is necessary for nurses to provide a "free milieu" which is vital to a creative nursing role; only in such a milieu can nurses understand the forces of illness and actively participate in discovering ways to mobilize the forces of wellness, in themselves and the patient.

I believe that most nursing organizational structures are the result of expediencies, but we must attempt to redesign them around beliefs and commitments to a philosophy of patient care and standards of nursing service. Most educational programs for nursing are historical accidents and must be redesigned to meet society's need.

I believe nurses have a most important role in the healing process, that their contributions include, as described by Jourard (1960):

1. the ability to grant freedom of expression to the patient, permitting the patient to be himself and to accept him as he is;

2. the ability to communicate profoundly, to overcome the patient's loneliness (if not a cause of illness, often a result) and to restore the patient's identity;

3. the ability to use every transaction with a patient as an opportunity for understanding; I believe that this fosters healing and the patient can say "She knows what I feel."

I believe that the nurse must learn to create her role with every individual person guided by the cues given by the patient. I believe the nurse has a responsibility to observe, to perceive, and to report on the patient with profound understanding of the physiology of his illness, the signs and manifestation of change, and have the ability to take appropriate action where necessary. There is great need for professionals to learn to work together and to learn to work with the public. This requires understanding and agreement about the worth and dignity of man as well as the unique contribution each can make toward a common goal. The importance of education as a resource for meeting new expectations in practitioner roles is obvious, education that is not just the accumulation of knowledge but education which becomes the source of strength in ridding ourselves of incapacities which are barriers to establishing and maintaining professional responsibility and commitment. This educational experience must provide access to the formation of values and a philosophy of nursing that gives meaning to the professional life.

Is it easy to be at home in the world? No. It is very difficult. Many people, many nurses, have a deep-seated psychological rejection of all whose color or culture or values differ from theirs. We speak easily about a basic respect for others in nursing. This respect must be acted upon if it is not to be merely a platitude. Nurses need to demonstrate a fundamental respect for humanity whether the people of the world have bathtubs or not. This need is today, not tomorrow.

REFERENCES

Aydelotte, N. K. Putting it all together—Nursing education and practice. *Journal of Nursing Education*, November 1972.

Carnegie Commission on Higher Education. *Higher education and the nation's health: Policies for medical and dental education.* New York: McGraw Hill, 1970.

Jourard, S. M. Roles that sicken and transactions that heal. Paper presented at the Alabama Nurses Association convention, November 1960.

Leininger, Madeline. Health care delivery system for tomorrow. *Washington State Journal of Nursing*, Winter 1973.

Levitt, T. Creativity is not enough. *Harvard Business Review*, June 1963, 41:3.

Paulson, Virginia M. Toward workable and humane solutions in nursing—Administrative review. *JAHA*, April 1, 1972, 143.

Pierson, George. Competing for power in today's university. *Chronicle of Higher Education*, January 1973.

Nursing in the Relative When

MARLENE KRAMER

> Probable-Possible, my black hen
> She lays eggs in the Relative When
> She doesn't lay eggs in the Positive Now
> Because she's unable to postulate How.
> (Winsor, 1956)

Many young graduate nurses of today, and particularly the baccalaureate nurse, is confronted with the same kind of dilemma as the black hen. Prepared by teachers who are visionary, the new college graduate often possesses skills and knowledges which at present are unmarketable, but lacks the skills and knowledges needed to function in today's health care scene. As is often heard, "the baccalaureate nurse can analyze and synthesize, but can't catheterize." Although the conflict between the Positive Now and the Relative When is perhaps more acute for the baccalaureate nurse, increasingly, for reasons I will explain later, the conflict is also being voiced by all new graduate nurses, no matter what kind of program they are from.

Preparing for the future and equipping the nurses of tomorrow with the visions of how things can and should be, and with the prerequisite skills to function autonomously and collaboratively with others in the health care system, is not wrong or misguided. The Relative When will be upon us before the ink on this page is dry. Inability to function in the Positive Now will constitute a problem for a while, but before long, sheer economic demands correct these deficiencies. No, the real problem is that the new graduate is not taught the knowledges and skills needed to postulate How. These nurses of tomorrow must be steeped not only in the visions and skills of the future, but must also know how to postulate and carry out plans that will make nursing in the Relative When a reality.

With the foregoing to set the stage, there are two major themes which I intend to develop in this paper. First of all, there is an assumption that I am going to make which must be made explicit. I am assuming that it is universally agreed among nurses that the youth of today, the nurses being prepared in schools of nursing right now, are the hope of the future. They, and particularly baccalaureate prepared nurses, were and are expected to make fundamental improvements in patient and health care. Some of them, such as the four baccalaureate nurses who

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The material presented by Dr. Kramer to the first conference of the Nursing Curriculum Project is contained in her book *Reality Shock: Why Nurses Leave Nursing* (St. Louis: C. V. Mosby, 1974), and is reprinted here by permission of the publisher.

developed the project at Goldmark hospital in New York (Lewis, 1969) have lived up to these expectations. Reinkemeyer (1971) flatly expresses the opinion that the college graduate has not made the improvements in health care that were expected. Waters *et al.* (1972) were able to distinguish differences in the bases for practice for only 6 out of a sample of 24 baccalaureate-prepared nurses. These findings, coupled with our own personal experiences and the writings of the employers of the graduates of today, would seem to suggest that if graduates of today are making fundamental improvements in patient care, they are not too apparent or measurable. Which leads to the question, Why? What are the difficulties new graduates are encountering in improving nursing care practices? An exploration of this question will constitute the first of the two major themes of this paper. The second theme to be developed will address itself to the question: "What can be done to better prepare nurses to practice in the Relative When? When one talks about Nursing in the Relative When, when one talks about the role of nurses in the future, it sounds as though this role is something known and fixed. The future is and will be so unstable, so flexible, so ever-changing (Toffler, 1970) that it is far more useful to teach future nurses skills and processes that will enable them to effectively influence nursing practice and will help them to decide role behavior on the spot than to attempt to teach some kind of prescriptive nurse role that will undoubtedly be out of date before it is learned, much less practiced.

WHAT ARE THE DIFFICULTIES NEW GRADUATES ARE ENCOUNTERING?

Rather than my trying to describe these, I would like to read to you two excerpts from some of the more than 600 interviews I have conducted with new graduate nurses all over the country during the past eight years that I have been working on this problem. I believe they aptly describe at least one of the major difficulties.

> The setting is a twenty bed post-cardiac surgical ward of a large county hospital. It's the evening shift—about 4:30 p.m. and you are alone because the one aide who works with you has gone to dinner. The day shift report indicates that the ward is fairly quiet and that most of the patients are status quo. All the patients on this ward are pre- or post-cardiac surgery, many having been just recently transferred out of the cardiac ICU which is adjacent to the ward. You are in the process of making rounds to see all the patients. Halfway down the large open ward is Mrs. Swape, a 52-year-old post-pump patient who also works as one of the volunteers on the ward. She seems very

sad and lonely and you remember that the day nurse had remarked that Mrs. Swape had not been her usual cheerful self that day. You pause in your flurry of activity, approach Mrs. Swape, and gently cover her hand with yours. As she looks at you, you think you detect tears welling up in her eyes. This is most unusual. During all of her past surgery, she has been very highly controlled—never crying or complaining, always saying "thank you" to the nurses even when you had to do painful procedures like suctioning or turning her. You've been concerned about her and this "super" control.

Reflecting to yourself that maybe Mrs. Swape is ready to open up and talk, you gently pull the curtains around the bed and seat yourself on the edge. After a few minutes Mrs. Swape begins to talk. She is in the middle of telling you how afraid she is, not about the operation and the surgery, but afraid the nurses on the ward won't like her anymore. It seems that a few years ago she had had surgery and had had a post-surgical psychosis that resulted in her really "flipping-out" for a few days—pulling out IV's, NG tubes, throwing things, and screaming at the nurse and everything. She remembered this after she came out of it and was so fearful that she might do it again after this surgery and then the nurses wouldn't like her anymore or let her come back to work on the ward as a volunteer. Mrs. Swape is in the middle of telling you this. Her face is pinched and anxious and she looks as though she will "let go" any minute now.

Suddenly you hear the good cart clanging through the doors of your ward. At this hospital the trays do not come up from the kitchen prepared; there are just pots of food and the staff has to serve it on plates, construct the special low-salt diets, etc. Furthermore, the cart has to be returned to the kitchen for use on the other floors. Most of your patients are fairly recent open-heart surgery patients. They need their food, particuarly the potassium. If you stay with Mrs. Swape, there's no one there to serve them the food; if you don't serve them the food and return the cart, the supervisor will call or come to the ward, and you know from past experiences that she takes a dim view of this kind of "inefficiency." If you leave, even for a minute, your intuition and judgment tell you that the climate will be broken and Mrs. Swape will clam up again.

Lest you think that this dilemma between individualized care for one and minimal care for many occurs only in in-patient settings, let me offer the following example.

> You have the same kinds of problems in public health. I'm a little freer because I'm in the home and I can do what I want when I want, but at the same time, the county sets priorities. Communicable diseases are high on the list; TB and VD follow-up also. A woman with a prenatal problem is very low on the list. When you get into a home and you find you really get to know the patient—no, person, not a patient. You find out where they are and what's happening, and if you are sensitive you really want to do something about it. This woman had three young children already and was pregnant with the fourth. I was trying to get her into prenatal clinic; she really needed to come. She was beginning to fill with fluid and I could tell from taking her pulse that her blood pressure was up. She'd missed a couple of appointments already because she couldn't get any transportation in. I said I'd see what I could do. You go back and you find out that this patient doesn't fit into the right classification. They don't have transportation services for those classified as prenatal. The poor woman just couldn't get transportation. Buses cost a lot and they live a long way away. We have a driver at the Health Department who drives TB patients, so I thought I would get this driver to go out and pick up this prenatal woman. Oftentimes, I would see the driver just sitting on the bench with nothing to do. I made all arrangements and filled out all the forms and went and talked to the community worker who drives patients back and forth and she said, "Sorry, I can't do it: I can only transport——patients." [A particular classification of patients.] The driver was sitting there knitting, not doing a thing, but still she couldn't go out and pick up this woman. I explained that she really needs the transportation and if you aren't busy . . . "I'm sorry; they have to be in a certain category." I talked to everybody to see if I could get some help for this woman. The woman didn't wear the right label so her need was just pushed aside and ignored.

Now, what exactly is the nurse to do in conflict situations such as those described? One new graduate gave me this answer after I had related the first incident to her.

> I know just how she feels. I've been in that situation a lot

> of times myself, and I know how she's torn . . . I know what my instructor would tell me to do. Stay with Mrs. Swape. Obviously! Your concern at this moment is about her and her total needs, so stay with her and do a good job of listening to her and seeing what you can do to get her to air how she's feeling and perhaps begin to relax and mend. That would be how my instructor would see it, and me too. That's how I was when I graduated, and really how I'd like to be able to do it now. But the fact is, I am responsible for those 19 others, and they do need their food too. You can't just ignore them. The thing that really burns me up is that when you take a problem like this to your supervisor or even, once I took it to the Director of Nursing, they just shrug. They don't see it; they can't seem to understand why I'm so upset about it. They see this just as something that happens only every once in awhile, and that on those occasions you just have to say, "Sorry, Mrs. Swape, I'll try and get back to you later." Then they pat you on the head and send you on your way; and the worst thing is, they think they've really helped you. They don't seem to realize that these are things that don't happen just once in a while; they happen over and over again every day. And also they sound like, you know, when you tell them about it—but these little things are what's really nursing, and the constant frustration over them really eats at me . . . What would I do? I hate to say it, but I've been worn down. When I graduated, I would have stayed and listened to Mrs. Swape. Now? I'd probably go ahead and serve the trays—that's what's important in terms of keeping your job and getting good performance ratings . . . those are really the only two choices I see.

I've quoted this somewhat lengthy response because it so aptly points up not only the problem, i.e., that new graduates are experiencing a discrepancy between what they have learned was good and valued in school and between what is now good and valued in the work setting, but also a very typical reaction to it, i.e., capitulation of school-bred values. Generally this conflict, this perceived discrepancy is accompanied by a severe shock reaction and rejection. Few neophyte nurses escape the pain and moral outrage of this reaction that I call the "reality shock" phenomenon. Only a few nurses however are able to manage the conflict constructively and reach a stage of "bi-culturalism." This very real discrepancy, and the emotional turmoil accompanying it, not only impedes new graduates from effecting the fundamental improvements in care that were expected, it has also been found that it is one of the major reasons why nurses are unhappy and why they leave nursing practice (Kramer and Baker, 1971).

Let us look more closely at the nature of this discrepancy between school and work values. Learning to become a nurse is accomplished through a process called adult socialization. During this process, new values and behaviors appropriate to adult positions and group memberships are inculcated into the aspirant. Of the many roles or role-constellations that the modern adult is called upon to perform, few exceed in importance the acquisition of requisite skills and attitudes for occupations. The behavior and attitudinal changes relative to occupations are usually internalized in the course of induction or training procedures such as that found in a school of nursing. These training procedures result in new images, expectations, skills, and norms as the person defines himself and as others view him (Rosow, 1965; Brim, 1968). Thus, there are both internal and external changes: within the individual, in his role set, and in the interaction between them. Furthermore, any socialization may be complete, i.e., involve both the internal and external changes, or it may be partial. Complete socialization includes both a value and a corresponding behavioral acquisition. Partial socialization is any omission or combination of omissions of either values or behavior. It can readily be seen that there are at least four possibilities of partial socialization. An individual can subscribe to the values of a particular culture or subculture, or school, or organization, but not to the behavior; or a person can do the opposite, i.e., subscribe to the behavior but not the values; or a last alternative is to adopt neither the values nor the behavior. If you think for a moment, I believe you can all visualize student and staff nurses who fit each of these four categories—the fully socialized, the dilettante who can mouth the words of value, the things one "ought" to do, but behavior or performance is well below par. Then there's the chameleon, the person who bends with the wind, doesn't appear to be committed to any kind of belief system, but he is behaviorally competent. His conformity is essentially adaptive without the corresponding value basis. And then of course, we've all pulled our hair and gritted our teeth in attempting to work with, to develop the individual who neither adopts the values or behaviors we are trying to foster and stimulate. This individual is often so indifferent to the values and may feel he has so little stake in the system as not to warrant even behavioral conformity.

Now, keeping in mind that in adult socialization an individual makes both internal and external changes—to be completely socialized he must adopt both values and behaviors—we must add another dimension. Nursing schools and nurse-employing organizations represent two different subcultures of the nursing world. The norms, values, and behavioral expectations are more different between school and work than they are between two different work settings (Benne and Bennis, 1959; Smith, 1965). It is therefore quite possible for a nurse to be completely socialized into one subculture, but not into another. To the extent that the two subcultures propagate and value attitudes and behaviors that are different, to that extent will an individual who desires to move from one to another encounter difficulty.

There is another dimension to this situation which must be explored. I have been talking about behaviors as though they are all on the same level. Such is not the case. Let us explore this notion further. Olmsted and Paget (1969) contend that professional socialization is a special kind of socialization, containing elements of both child and adult socialization, although identical to neither. To understand this significant point, let's look at some of the similarities and differences between child and adult socialization and contrast these with medical education as Olmsted and Paget (1969) do, and with professional nursing education, as empirically known by all of you, and also as known through the work of Olesen and Whittaker (1968).

Brim (1968) notes that the purpose and function of childhood socialization is to develop the personality, to provide the child with a sense of identity. "Who am I?" Childhood socialization is essentially additive and elaborative; it deals essentially with "shoulds" and "oughts"—what people "should" or "ought" to do and think, not with what they, in fact, do and think. "Thus, childhood socialization is directed to the learning of values, in contrast to adult socialization, which focuses on the learning of behaviors."

Not only is the content of childhood socialization different from that of adult, the structure also differs. Adult socialization typically does not require the individual to play the learner role, nor does it typically occur in settings in which the individual is acted upon by socializers with a great power differential over him (Brim, 1968). This can be contrasted with childhood socialization wherein the learner role is dominant and typically the "socializee" is acted upon by individuals with considerable power and authority.

Olmsted and Paget contend that, viewed from this perspective, medical school is an extension of childhood socialization (1969, p. 664). Analysis of the descriptive accounts of nursing school socialization provided by Olesen and Whittaker (1968) and Williams and Williams (1959) would lead to the same conclusion for nursing students. In both of these situations, typically, the student is provided with a core of "shoulds"—attitudes, values, and norms which have as their content what the faculty believe doctors and nurses "should" and "should not" do and think in a variety of situations. These attitudes, values, and norms are *role general*, rather than *role specific*, i.e., they pertain to the abstract role of nurse, rather than to a specific role which the student will one day occupy. Moreover, because they are role general, they lead to development of role-general behaviors, rather than role-specific behaviors. The focus in nursing schools is on the principles and skills required in the general assessment of level of wellness of preschool children (role-general behavior), rather than on the specific and rapid assessment of two-year-old Johnny with raspy, stridorous respirations.

Other elements of childhood socialization that are evident in professional health occupation socialization are playing the role of learner in a situation in which there is considerable authority differential. In short, it would seem that the socialization that takes place in medical and nursing schools prepares students to be medical and nursing students, but not physicians and nurses. Although the conditions exist for maximum socialization to take place, the emphasis is on the "shoulds" or values of practice, and on role-general, rather than role-specific, knowledges and skills. Therefore, upon graduation, it is likely that the student will be incompletely socialized. The new graduate, socialized into a world of "shoulds," is far from being a finished product. Upon graduation he is charged with the task of translating these shoulds into concrete, role-specific behaviors.

According to Olmsted and Paget, "a major portion of professional socialization occurs after the completion of medical school" (1969, p. 667) in the context of intern and residency programs. It is here that the neophyte learns role-*specific* behaviors. This brings us to the crucial question relative to the professional socialization of nurses. Given the parallel in emphasis on "shoulds" in nursing education, and the focus on role-*general* nursing behaviors as contrasted to role specific, we see that the initial work experience of the neophyte nurse must be a continuation of her socialization if adult socialization is to occur.

In comparison to school, work permits, encourages, nay, *demands* adult socialization. The work environment demands that the nurse produce role behaviors, not in generalities but in specifics—the care of a given caseload of patients, with multiple unknowns and uncertainties, to be completed within a specified period of time. The neophyte very quickly perceives that the role-specific behaviors demanded of her are predicated upon a value system somewhat different from the one promulgated in the school setting. Therefore, she finds herself in a situation in which she lacks the necessary role-specific behaviors; moreover, the value system upon which her general nursing behaviors are built seems to be in opposition to the prevailing value system of the work environment.

Clearly, some kind of role transformation will be necessary. In discussing the process of role transformation Olmsted and Paget make the point that if students are placed in socializing contexts which perpetuate *pre-adult* socialization, role transformation will have to occur after school is completed and in contexts in which the appropriateness or the desirability of the change, because it is left unexamined, and many times is done under great pressure, is open to serious question. On the other hand, if alternative socialization routes are designed and planned, if some of this role transformation takes place during the school socialization, then it is likely that in mediating what is perceived as conflicting demands, the individual will learn behaviors and will reorder previously held values so that he, in fact, becomes a somewhat different person (Olmsted and Paget, 1969, p. 669).

By way of summary, let us take a look where we are with this line of reasoning. To become functional in the adult occupational world, one must be socialized into the values and behaviors advocated and needed by a particular occupation. The nurse socialization process has the characteristics of pre-adult socialization in that it emphasizes "shoulds" and role-general behaviors to a greater extent than role-specific behaviors. Furthermore, in most schools of nursing, there is little opportunity, plan, or design for guided role transformation to take place. Upon graduation, therefore, the neophyte is confronted with a work situation in which role-specific behaviors are demanded, but she lacks them. In the process of acquiring the work-rewarded behaviors, she soon perceives that the values in the work system, such as "safe and efficient organization and implementation of care for five patients," are not the same as the values cherished from the school scene, for example, careful and detailed planning for continuous and comprehensive care for each patient or family in one's caseload. Equipped with a bushel of "shoulds" that are frowned upon, or at least only tolerated by the work subculture, and possessing only a paper bag of highly valued role-specific behaviors, is it any wonder that the neophyte encounters conflict and difficulty? Is it any wonder that she is quick to abandon the work scene or abdicate cherished values of individualized patient care? If she does this, is it any wonder that the new graduates of today have been unable to make the fundamental improvements in patient care that were expected of them? They will not be able to function in the Relative When because they are unable to Postulate How.

I have described the nature of the difficulties and something of the process that goes on in role transformation; what are some possible solutions? Well, one obvious possibility is a return to the old apprenticeship system of nursing education. Focusing on the role-specific behaviors (punctuality, organization, skilled performance of procedures) of the work subculture and the corresponding value system meant that little role transformation was required of the apprentice nurse when she changed status from student to graduate. Such a nurse was indeed capable of nursing in the Positive Now. However, her visions of and ability to function in the Relative When—the health care system of the future—were sadly lacking. One factor that appears to be constant in our society and in the world is change—changing values, mores, technology, political theories, and the like. Our future is a world we cannot even predict. If the goal of man is to actualize himself and to create and provide the opportunity for each person to maintain as positive a state of health as possible, then we as nurses must aspire to creating a health care system in the future that is better than the one we have now. Training nurses to practice in the Positive Now will maintain the status quo, but will not help us to achieve better health care in the future. People's needs for continuity and comprehensiveness of health care cannot be handled on an assembly-line basis, or programmed into a computer, human or otherwise.

The value system espoused and promulgated in many schools of nursing today is based on a premise and a view of the health care system of the future—the Relative When. Such values are not misguided; the problem lies with the lack of teaching or attention to role behaviors that correspond with these values. It is not enough to teach students to value the dignity and rights of all patients entrusted to their care and to teach them role-general behaviors such as "covering patients with a blanket during baths" or "screening for treatments." It is not wise to teach them specific procedures, behaviors, and facts, for as noted in the introduction to a very useful little book entitled *Tools For Change:*

> What tools will be useful in a future that we cannot even predict? The tools we fashion cannot be physical; technology is changing at a rapid rate. Nor can they be concepts or facts, for these change as new perceptions emerge. The tool then, that we offer is process—process to confront, relate to, modify, the facts and the technology.

If new graduates are to function in the Relative When and help in the improvement of health care in the future they must be taught the role-specific processes that will enable them to Postulate How futuristic and general role behaviors can be brought together with the reality of the Positive Now. We must teach our future nurses the process and techniques of interpersonal competence so that they can effectively influence the physician or co-worker. It is only in this way that futuristic values and role-general behaviors will become operational in the health care system.

WHAT ARE THESE ROLE-SPECIFIC PROCESSES AND BEHAVIORS OF INTERPERSONAL COMPETENCE?

First of all, the process of interpersonal competence must be defined. The nurse is socialized into a set of values that are different from those operative in the work situation. Values are commands or directives for action to which individuals are committed. As such we operate on our values, using them not only to guide our own actions but also to interpret and predict the actions of others. When individuals are placed in a social system that is governed by a different set of values, and when they attempt to influence others to perform what they believe to be "good" nursing care, they are no longer able to predict accurately their impact upon others, or others' impact upon themselves, unless they know and can emotionally deal with the different set of values. They will be interpersonally incompetent as long as they cannot predict or interpret behaviors based on values or norms.

The role-specific behaviors related to interpersonal competence are processes or sets of abilities that allow an individual to shape the responses he gets from others (Foote and Cottrell, 1955). Weinstein (1969) describes three of these. First of all the individual must be able to correctly predict the impact that his actions will have on the other persons' definition of the situation. This is because others behave in terms of the way *they* define the situation, i.e., according to their own value and perceptual system. Second, the individual must possess a varied and large repertoire of strategies or potential lines of action. And third, the individual must have the necessary personal resources to be able to employ effective tactics in situations where they are appropriate. In all likelihood, the neophyte nurse unschooled in work values is not interpersonally competent in the work situation. Because she is operating in a value framework different from that of most of her co-workers, she is not able to correctly predict the impact her behavior will have on others' definition of the situation. She possesses few strategies or lines of action that are appropriate to the work situation. Without these, she will not be interpersonally competent, even if she does have personal resources, such as theoretical knowledge and understanding of diseases, lab tests, technical skills, and the like.

It is important to note that some people—perhaps because they lack cue sensitivity or a capacity for empathy—are not interpersonally competent regardless of their cognitive or value framework. But I am not talking about this relatively small percentage of the population. I am talking about people—nurses—who do have interpersonal competence in a value framework with which they are familiar. They are incompetent in a new value framework, not only because they do not know what the values in the new system are, but also because they have had no experience relating to others in this value context.

The teaching of interpersonal competence is a challenging educational task; it involves affective as well as cognitive objectives. It is not enough to know in your head what another's values are, but you must also be able to relate to that person in his value context without absorbing or losing your own values. Some possible educational strategies for dealing with differing values as well as learning what the differences in values are might include the following. First, begin with simulation of conflict situations. These small doses of conflict can serve to innoculate and help in the development of resistance to persuasion to prevent the wiping out of the neophyte's budding futuristic values. Toward the end of the educational process however, the student must have a chance to reality test her ability to relate to and influence co-workers within their value context. With interpersonal competence comes the ability and capability of bringing about change within the new system—a goal long sought and desired of the new graduates of today.

I hope it has been made clear that when I am talking about the process of interpersonal competence, I do not mean personality or interpersonal relationships. I am not talking about the development of desirable personality characteristics or charm or charisma. By interpersonal competence is meant empathy—the ability to define and predict the situation as the other sees it and then to call upon a reservoir of developed strategies and utilize these to bring about some desired goal. Perhaps some actual examples of the activities of interpersonally competent nurses will clarify the kind of thing I am talking about. I realize that there is a risk in doing this because some of you may judge the nurse on the basis of whether she did right or wrong according to your value system, rather than discern the strategy and the process behind the behavior which did or did not make it possible for the nurse to influence others constructively and effectively. The following illustration was taken from a tape-recorded interview of one of the nurses in my current research sample.

I decided I just had to mount a campaign against all these

> ridiculous rules, like, in this hospital nurses cannot do specific gravities. So they charge the patient a dollar to send it down to the lab when it can be done in two seconds on the ward, and save the patient the expense. . . . So I started this questioning campaign. "Why?" (it's a rule) "Can't the rule be changed?" (No) "Why?" and so on. Finally, I don't know if it was just to shut me up or what, but she (the head nurse) got it changed. . . . I praised her to the hilt for this and told one of the relatives how she had done this, in front of her so she could hear it. . . . Then I started on something else—getting the isolation procedure changed I think. . . . After the first one, the others came much easier. I just work behind the scenes and let her take all the credit. . . . With my ideas and her power, we're getting somewhere.

The next excerpt was taken from a tape-recorded interview done during a week-long observation session of one of a group of nurses selected from a nation-wide sample of 220. Although it's a bit long, it identifies some of the empathic and predictive processes that go on in interpersonally competent lines of action.

> What did I do? You mean about getting the nursing office to go along with the home visit? (Yes) Well, it was kind of a long process. We'd (the staff on the pediatric unit) all decided that this is what we wanted to do, that those kids coming in for open hearts, and their folks really weren't getting enough information and they couldn't hear us when we tried to explain things to them after they got here. That the best thing was for us to go out and visit them before they came into the hospital for the surgery. The surgeons and pediatricians thought this was a great idea and said, "go to it." They even offered to go see Mrs. ——— (DNS) for us, but I knew that that was a power play that would leave a bad taste in her mouth. I also felt pretty sure that Mrs. ——— (DNS) wouldn't be the stumbling block. She seemed pretty much on the ball every time I've talked with her. She doesn't know much about patient care, but she knows that she doesn't and doesn't try and pretend. She's reasonable and I really thought that if I could explain it to her logically and rationally that she'd go along with letting us make home visits on duty time. We figured from past experience, you know, that the real problem was ——— (the supervisor). She's very negative, against everything. I know, I'm probably exaggerating, but that's the way she seems to me.

Everything I ask her: can I do this? Can we have medicuts? Can the diet kitchen serve smaller portions of food to the kids? Everything is a real big deal. (What happens when you ask her?) Oh, she doesn't usually say no right off. She puts me off for a couple of weeks and every time I bug her about it, she comes up with a reason why we can't do it or a "we'll see" thing. Ideas die aborning with her. You can never quite say that she's opposed to things, but that's the way it comes out.

(So, what did you do about this home visit idea?) Well, I decided that it would be a real delaying action to go through ——— but yet, she's my supervisor and that's the way you're supposed to do it, etc. Besides if I went directly to (DNS) it would sort of put both her and ——— on the spot. So, one day, I casually mentioned to (supervisor) that I had read an article about this, and what did she think about it—sort of in the abstract, not telling her how far we already were in the planning of it—you know, what I told you earlier, about how we'd worked out with Dr.'s office nurse to call us about one month before an open heart was scheduled and so on. (Yes, I remember.) What was (supervisor's) reaction? Oh, I knew that in the abstract, she's more open to ideas. She asked some questions and said that that sounded like a good idea, but that of course, it must require a lot of coordination, and you'd have this problem to work out and that one and so on. I just listened and sort of tried to end the conversation by getting her to repeat again that she thought it was a good idea—sort of on a positive note, you know . . . and then I particularly tried to remember some of her exact words—the positive ones, the ones in favor of the idea. (Yes, then what?) Well, here's where we got sneaky—but it worked! Jill (ward secretary on pediatrics) is a good friend of Mrs. ——— (the secretary in the nursing office). You know they have lunch together and that sort of thing. Well, we set it up so that Mrs. ——— would call Jill when Mrs. ——— (DNS) was going to go to the dining room for coffee. This took a little doing, because she didn't go every day, and lots of time she'd have some visitors or guests with her. We had to get her alone, or with just one other person with her. Well, after several attempts we finally made it. The idea was that as soon as we knew she was going to coffee, a couple of us would dash down the back steps and get either in front or in back of her in the coffee line. And this is what we did. In fact we sandwiched her in between Carol and I, and we

> started very casually, you know, started telling her about the patients, and about Joey—you know the little boy with the open heart I was telling you about—and we keep up a steady conversation so that she really has no choice but to sit down and have coffee with us. So, we started in and told her about the idea, and I told her that I had talked with ——— (the supervisor). I didn't tell her exactly what I said or what Jan had said; just that I had talked with her about it. And Mrs. ——— was very enthusiastic about the idea. I could see she was really "go." Well about that time, we spied (supervisor) coming into the dining room, and we knew we had to take care of that problem or we'd get all kinds of blocks thrown up before we got to do it. So Carol dashes over and invites (supervisor) to have coffee with us. I even bought Mrs. ——— (DNS) another cup of coffee so she wouldn't leave. When (supervisor) sits down, I open things up by saying: "We've been talking about that idea I talked with you about the other day—you remember, the floor nurses making pre-operative visits on the children scheduled for open-heart surgery." Then I went right on and said that Mrs. ——— (DNS) thought it was a good idea, and then I looked right at (supervisor) and quoted some of the positive things she had said when I talked to her. Well, she was sort of trapped. To tell you the truth, I felt a little guilty for trapping her like that, but it worked. She could hardly disagree when her boss was so enthusiastic about the idea, and when I made it *sound* like she also had approved of the idea when I had talked to her earlier. . . . Carol and I made sure that before we finished coffee, we not only had permission, but that it was understood we were going to make the first visit on Friday. I think they were kind of impressed with all the arrangements and plans we had already worked out.

TASK ANALYSIS

Another kind of role-specific behavior which is highly instrumental in increasing the interpersonal competence of the nurse in any future health care system is the ability to analyze virtually any situation and decide the most appropriate worker and means to do the job, to give the care. This analytical schema is the second major theme of this paper. Providing students the opportunity to develop skill in this kind of analysis before they graduate will help immeasurably in their functioning both in the Positive Now and in the Relative When.

Let us begin by looking at a task, any task or bit of work which needs to be done, but preferably a task which involves materials rather than people. (People are much less predictable than are materials.) There are at least two different ways in which a task, such as assembling a car, might be organized. The whole task might be done by a single worker, such as was advertised for the assembling of a Mercedes Benz by a single mechanic; or workers may each do a part of the task, as is usually done on the Detroit assembly lines. In that situation, one worker or group of workers is responsible for assembling the chassis, someone else puts on the wheels, someone else affixes the aerial and so on. What are the results of organizing work on a whole-task versus a segmented or part-task basis?

Part-Task System

First of all, in the part-task operation, since the task is segmented, only a few skills are needed. These skills are usually learned on the job. They can be learned in a relatively short time and it is worth the while of the organization to teach the worker how to do them exactly the way they want them done, i.e., in a particularlistic rather than universalistic fashion. A by-product of this factor is increased loyalty of the worker to that particular organization. Since the worker repeats the same task very frequently, he has the opportunity to develop tremendous skill and speed in the performance of the task, and his work output can easily be judged in terms of the units of the task completed. Since the total function of the operation has been segmented into component tasks, each performed by a different segment of workers, it is mandatory that some kind of external controls and coordination, usually in the form of rules and supervisory officials, be set up to insure the success and efficiency of the total operation. The supervisory official who performs this coordinative function must necessarily have more knowledge, understanding, and authority than the worker who is doing only a part of the whole. Therefore, there is the need for hierarchical control and an authority structure.

Other necessary by-products also accrue. Since the worker is only going to be doing a limited segment of the task, for which he will be trained on the job, hiring standards for this kind of operation can be quite low. This work system is very vulnerable to breakdown but because of the low hiring standards and rapid on-the-job training, the breakdown parts (i.e., people or machines) can be readily and fairly easily replaced. All of these facets would tend to make the system very efficient cost-wise.

Whole-Task System

A work system organized on this principle would require that the worker possess all of the immediately and potentially necessary knowledge and skills to do the total job. Since the scope of knowledge and skills needed is extensive and broad, generally considerable time is needed to acquire them. The employing organization can not usually afford to support the worker while he is learning them; therefore, he must acquire the knowledge and skill before employment, usually in an educational institution. Since the knowledge and skill is to be used in a variety of situations, it would tend to be universal rather than particular to a specific organization. Because of the highly esoteric and individualistic combination and recombination of the subtasks which go to make up a whole task, particularly when the product is human, the skill component is not necessarily in the rapid and repetitive performance of any one subtask, but rather in the skill and judgment of the combination of the subtasks. Therefore, judgment of outcomes is best made in terms of correct procedure rather than units of successful outcome.

Since the individual worker executes the entire operation, coordination of tasks and external controls are not needed. In its place is internalized coordination and standards of performance, norms, or codes of ethics. Evaluation and quality control are made on the basis of correct procedures; such judgment must be made by others who have equal knowledge and skill to judge, i.e., one's peers. There is therefore, no need for a hierarchical control or authority structure; a peer control structure is not only desirable but essential. Other by-products indicate that hiring standards must be fairly high and must meet prescribed specifications. This work system is not particularly vulnerable to breakdown since the worker controls all facets. He can make immediate and current adjustments to compensate for breakdown. When massive breakdown occurs, the worker is not easily replaced. Because of the longer training period and the higher job standards and qualifications, this system is more costly than the part-task system—particularly when the nature of the task is routine. And that brings us to another variable which must be examined in respect to these differing modes of work organization.

The nature and characteristics of the task to be performed must also be analyzed. First of all, if we define a task as a set of activities performed to achieve a desired result, and the end product of performing a task as an outcome, or actual result, the goal is to decrease the margin of error between the desired and actual outcome. Carrying out a set of task activities, however, always entails overcoming some kind of resistance, for example, the inertia of an object which is to be moved, opposition to a competitor, or the complexity presented by a problem to be solved. The amount of resistance to be overcome is not too critical because both people and machines can be trained or programmed to overcome given amounts of resistance. What is critical is the variability and predictability of resistance, because changes in these factors resist training or programming. On the basis of the above, Scott distinguishes two polar types of tasks (Scott, 1966). Inert tasks are those in which the resistance is relatively constant across performances, and because the resistance is constant, it is predictable. Active tasks are those tasks in which the resistance is variable across performances and, because of this, less predictable.

The classification of tasks into inert and active has important implications for designing efficient work arrangements and for evaluating and controlling task performances. Because of the predictability and constancy in degree of resistance, inert tasks are those which are routine and standardized. They can be known in advance and performance programs for them can be devised; many can be computerized. Little decision-making is required; workers can be trained to do them after short periods of training. Active tasks, on the other hand, because of their variable and less predictable resistance patterns are not routine in nature. They require greater discretion and judgment on the part of the worker, and greater individual competence. This requires more training and is therefore more costly.

In summary then, it can be seen that inert, routine tasks are quite suitable for the part-task system of organization, and that this system of organization results in or has the characteristics of that kind of organizational system generally called "bureaucratic." For example, note the high degree of correspondence between the usually accepted characteristics of a bureaucracy and those resulting from a part-task organizational system.

Characteristics of a Bureaucracy	*Part-Task Analysis*
Specialization of roles and task	Few skills required—particularistic in nature
Autonomous rational rules	Specialized skills learned on the job
Overall orientation to rational, efficient implementation of specific goals	Loyalty to the organization
	Evaluation through work output
Organization of positions into a hierarchical authority structure	Hierarchical control and authority structure

Characteristics of a Bureaucracy	*Part-Task Analysis*
The impersonal orientation of contacts between officials and to clients	External standards through rules and regulations
	Control and coordination by some official who is removed from the workers
	Development of a layer in the organization whose major purpose is to maintain the organization

Correspondingly, active non-routine tasks can be seen to be quite suitable for the whole-task organizational system, this system having the major characteristics of what is generally labeled as the professional system of work. Again note the almost exact correspondence between common descriptions of the characteristics of a profession and the characteristics which result from the whole-task analysis.

Characteristics of a Profession	*Whole-Task Analysis*
Specialized competence having an intellectual component	Worker must possess total knowledge and skills
Extensive autonomy in exercising this special competence	Skills learned in separate educational institution
Strong commitment to a career based on a special competence	Loyalty to an occupation or discipline
Influence and responsibility in the use of special competence	Long training period
Development of training facilities which are controlled by the professional group	Evaluation through process rather than output
Professional's decision-making is governed by internalized standards	Internal standards and coordination
	Peer control and authority structure

Before proceeding further, a few clarifications in the above concepts must be noted. It is possible to process active tasks through the bureaucratic or part-task system. And in fact, this is often done. In such cases however, participants must behave as if the resistance offered by the objects being processed were constant. It is quite likely that standard approaches to active tasks will entail a high proportion of errors or failures. (The latter are defined as instances in which the actual result is not consonant with the desired result.) Perhaps an example will clarify this. As noted earlier, assembling an automobile can be viewed as an inert task in which several workers or groups of workers are trained to perform various segmented tasks. The degree of resistance to each task is known and standardized, i.e., the amount of inertia which must be overcome to lift a fender and place it on a car, the energy required to tighten the wheel lugs, and so on, is known and constant over repeated performances. Since the resistance is predictable and known, and since workers can be efficiently programmed accordingly, the likelihood is very high that the job will be accomplished accurately (i.e., desired outcome will fit actual outcome) and inexpensively.

Now, on the other hand, let's take the example of getting a post-operative patient out of bed. Is this an active or inert task? Would a professional (whole-task) or bureaucratic (part-task) method of work organization have the least likelihood of error? Well, let us start with the constancy and predictability of resistance. Even the nurse who has very little experience knows that the task of getting a post-op patient out of bed has a great degree of variable resistance. Is this a post-op open-heart surgery patient or an appendectomy? Is the patient a child, a middle-aged adult, or an octogenarian? First day post-op or several days later? A hypoglycemic patient on IV's or a well-nourished patient? And so on. If the work of getting this active task organized and accomplished is done on a part-task (bureaucratic principle) base, i.e., assign Nurse Aide Jones to get all the post-op patients up and walking, we can readily see that the likelihood of accurate task performance (correspondence between actual and desired results) is in grave doubt, although this would probably be the least expensive way of accomplishing the task. On the other hand, if the professional (whole-task) method were used, the margin of error would undoubtedly be reduced, but the cost would increase. Summarily then, quality of outcomes is high and cost is low when inert tasks are done by the bureaucratic mode of work organization, and active tasks done in the professional mode. When inert tasks are done in the professional mode (i.e., professional workers doing routine, repetitious tasks such as filling in diet slips, making unoccupied beds, and so on), quality outcome will probably be high, at least initially. Later on, quality may suffer because of boredom, low morale, and worker dissatisfaction. Costs will definitely be higher than need be if professional workers perform inert tasks.

Another factor which enters the picture is the evolutionary nature of the variability of resistance. What is highly variable today may be highly standardized and routinized in the future due to increase in experience, knowledge, and techniques. Therefore, an active task of today—for example, assessing a patient's reactions to a specific drug—may be an inert task tomorrow. It is quite possible that adhocracy as a form of work organization has as its essence the considered and ever-changing assessment of the resistance of tasks and the use of appropriate systems of work to achieve error-free results within acceptable costs.

To summarize, tasks aimed at surmounting constant resistance can be effectively and efficiently organized by means of bureaucratic arrangements since the amount and variability in resistance is known. Tasks aimed at overcoming variable resistance are usually better organized in a professional manner since skilled, non-routine responses are better calculated to meet unpredictable resistance with a minimum of errors. The problem in respect to preparing nurses to function in health care systems of tomorrow is that we must socialize the nurses of tomorrow into role-specific behaviors such as task analysis and delegating of appropriate tasks to workers dependent, not upon role or job classification, but upon whether a particular worker has the ability to assess the degree of resistance a particular client or patient may bring to a specific task or treatment. Viewed in this manner, we can see that tasks such as passing medications, which oftentimes have a predictable amount of resistance, would be better performed by workers who are less able to perform tasks that have much more variable resistance. At present, it is the rapid and efficient completion of part-tasks for which the nurse is recognized and organizationally rewarded. In the health care system of the future, nurses will be expected to and will need to know how to determine who is the best worker to do a specific task and to creatively coordinate the part-tasks of other workers. The strategy of task analysis enables the nurse to accomplish patient care goals by using forms which closely follow function and not the familiar reverse of function following form.

This is the legacy, the suggestion, I leave you with today. Rather than speculating on the specifics of what the health care system of tomorrow will be—just as soon as this is done, it will be found deficient and will need redoing—nurse educators must meet the real challenge of preparing the neophyte with the interpersonal strategies, lines of action, role-specific processes and behaviors that will enable her to put into effective practice the idealistic professional "shoulds" that she learns so well. Doing this will enable us to graduate nurses who value individualized comprehensive patient care, but who do not require a "hothouse" set of circumstances in which to achieve their goals. Their ideas and creativity will not be lost because they have not learned how to make their ideas palatable and feasible in the work worlds' value context and situational demands. They will not be forced into choosing allegiance to one way of organizing work over another regardless of the goal they are trying to achieve. Rather, they will be free to analyze which form best fits the specific goal desired. In this way, new graduates will be able to make the fundamental improvements in patient care that have long been expected of them, with the result that we will have more patients and clients who are truly receiving continuous and comprehensive nursing care.

REFERENCES

Benne, Kenneth, and Bennis, Warren. Role confusion and conflict within nursing. *American Journal of Nursing*, February 1959, 59 (2): 196-198; March 1959, 59 (3): 380-383.

Brim, Orville G. Adult socialization. In John A. Clausen (Ed.) *et al.*, *Socialization and society*. Boston: Little, Brown, 1968. Pp. 184-226.

Foote, N., and L. S. Cottrell, Jr. *Identity and interpersonal competence*. Chicago: University of Chicago Press, 1955.

Kramer, Marlene, and Baker, Constance. The exodus: Can nursing afford it? *Journal of Nursing Administration*, May-June 1971, 1 (3): 15-30.

Lewis, Edith. Four nurses who wanted to make a difference. *American Journal of Nursing*, April 1969, 69 (4): 777-782.

Olesen, Virginia L., and Whittaker, Elvi W. *The silent dialogue*. San Francisco: Jossey-Bass, 1968.

Olmsted, Ann G., and Paget, Marianne. Some theoretical issues in professional socialization. *Journal of Medical Education*, August 1969, 44: 663-669.

Reinkemeyer, Agnes. New approaches to professional preparation. *Nursing Forum*, 1971, 9 (1): 27-40.

Rosow, Irving. Forms and functions of adult socialization. *Social Forces*, September 1965, 44: 35-45.

Scott, W. Richard. Professionals in bureaucracies—areas of conflict. In Howard M. Vollmer and Donald L. Mills, *Professionalization*. Englewood Cliffs, N. J.: Prentice-Hall, 1966. Pp. 265-276.

Smith, Katherine M. Discrepancies in the role-specific values of head nurses and nursing educators. *Nursing Research,* Summer 1965, 14: 196-202.

Toffler, Alvin. *Future shock.* New York: Random House, 1970.

Waters, Verle, *et al.* Technical and professional nursing: An exploratory study. *Nursing Research,* March-April 1972, 21 (2): 124-131.

Weinstein, Eugene. The development of interpersonal competence. In David A. Goslin (Ed.), *Handbook of socialization theory and research.* Chicago: Rand McNally, 1969.

Williams, Thomas, and Williams, M. The socialization of the student nurse. *Nursing Research,* Winter 1959, 8: 18-25.

Winsor, F. The space-child's Mother Goose. *Atlantic Monthly,* December 1956, p. 41.

PART THREE

When we asked our seminar members to compose position papers for us, to write as if there were no constraints and to imagine an ideal nursing system, some wrote instead about the constraints with the fervor and interest that comes only from a deep sense of commitment combined with a high level of frustration. These papers—with their great variety—are very enlightening about the state of affairs in the health care system. We think the selection we have made to present in this anthology reveals several important facts about nursing today.

First, if these papers are any indication, relatively few health care professionals (some of our writers are not nurses) seem to want to or to be able to look at health care or nursing from an overall, comprehensive viewpoint. One can usually tell if our writer is working in nursing service, nursing education, continuing education, independent practice, or public health because the bias toward the writer's own field is so very strong. Second, despite their individual biases, many of our writers arrive at similar conclusions and see the same needs and flaws in the health care system. A few examples of such recurrent themes are: the prediction that in the future emphasis will shift from illness to health care; the rise of the health team working in the collaborative mode; the need for closer relationship between service and education. We were glad to discover that the list of agreed-upon items is quite long.

These two facts together imply something very important: the need for dialogue between the representatives of the various subgroups in the health field has never been greater, for the similarity of their ideas and aspiration is much more extensive than they themselves sometimes realize. When they wrote these papers, our seminar members had met only once; since then they have met several more times. Most of them now are probably working with a heightened awareness that they share with other professionals in the region common frustrations and common hopes. The existence of that common ground is what will make the work of this project possible.

However, let there be no mistake: there are areas of disagreement and even discord, and, as the passages we have selected should make clear, the health field has its share of highly independent, even fiesty people. We like that; it is the leavening that will make our loaves rise.

We have selected five papers to present in their entirety, partly because of their quality and partly because together they give a good feel for this combination of harmony and dissonance. Following these are selected passages from all of the other papers, grouped under four main headings: Health, the Health Care Delivery System, Nursing Practice, and Nursing Education. We have included materials from every paper submitted to us.

The Future Role of the Nurse: A Proposal

Sylvia E. Hart

OPERATIONAL DEFINITIONS

Health

An individual's or group's observable expression of the capacity and ability to maximize its potential and maintain a state of dynamic equilibrium while moving unidirectionally and sequentially through the life (development) process.

Underlying Assumptions (Dunn, 1959; Dubos, 1965; Menninger, 1963)

1. The human organism is an integrated whole, an open system, more than and different from the sum of its parts.

2. The life-time objective of the human organism is to maintain itself as this integrated whole or to maintain pattern and organization in the midst of constant change.

3. The human organism maintains itself as an integrated whole through a process of reciprocal adaptation between itself and the environment.

4. Reciprocal adaptation helps the organism to maintain a steady state or dynamic equilibrium. A certain set of conditions both within itself and in the environment must be present for the steady state to maintain itself.

5. Through the process of reciprocal adaptation each individual maintains the proper relationship between and among these conditions. Adaptation includes both active and passive, conscious and unconscious behavior.

6. There is a constantly changing range of adaptive power within an individual. When the individual is functioning within this range, equilibrium (health) is maintained. When the individual is called upon to react beyond this range, signs of disequilibrium appear (illness).

7. Each individual moves through the life process from conception to death on a continuum of sequential unidirectional development.

8. The human organism distinguishes itself from other living systems by complexity, creativity, consciousness, and freedom.

9. Whatever can be said about individual human beings as a system can be said about groups of human beings as a system.

Health Care Delivery System

A comprehensive organization which provides the following readily accessible services to all individuals and groups that are a part of it.

1. Health promotion and disease prevention—family and community settings
   a. Screening—health assessment
   b. Education—increase capacity for self-actualization
   c. Protection—immunization and promotion of sound health habits
   d. Environmental control and enrichment—production and promotion of optimal setting for interaction
2. Health restoration—institutional settings
   a. Management and control of functioning mechanisms
   b. Collaborative therapeutic intervention based on medical and nursing diagnoses with continuous assessment, evaluation, and modification
   c. Promotion of appropriate individual, family, and group participation in the care process.
   d. Comfort and support if and when the termination of the life process is imminent

Role of the Nurse

Plan, implement, coordinate, and evaluate health care services in collaboration with other health workers.

Nurse

A person educated and trained to assume some or all of the functions inherent in the role. Level of function is determined by educational preparation and professional experience.

1. Level I: Nurse Administrator—preparation at doctoral level
2. Level II: Nurse Clinician—preparation at master's level
3. Level III: Nurse Practitioner—preparation at baccalaureate level
4. Level IV: Nurse Assistant—preparation at associate degree level

EDUCATIONAL PREPARATION FOR NURSING PRACTICE

Level I—Doctorate

1. Educational administration
2. Health care administration

Level II—Master's with option for doctorate

1. Nurse clinician generalist—health maintenance major teaching and management minor
2. Nurse clinician specialist—health restoration major with focus on one of three settings—acute, intermediate, or long-term; teaching and management minor

Level III—Baccalaureate

Nurse practitioner—upper division nurse generalist major; human development minor

Level IV—Associate

Nurse assistant—lower division nursing major; human development minor

RELATIONSHIP BETWEEN NURSING EDUCATION AND NURSING PRACTICE

1. All health care facilities have a collaborative relationship with a nearby college or university.

2. All nurse administrators and nurse clinicians have joint appointments with a college or university.

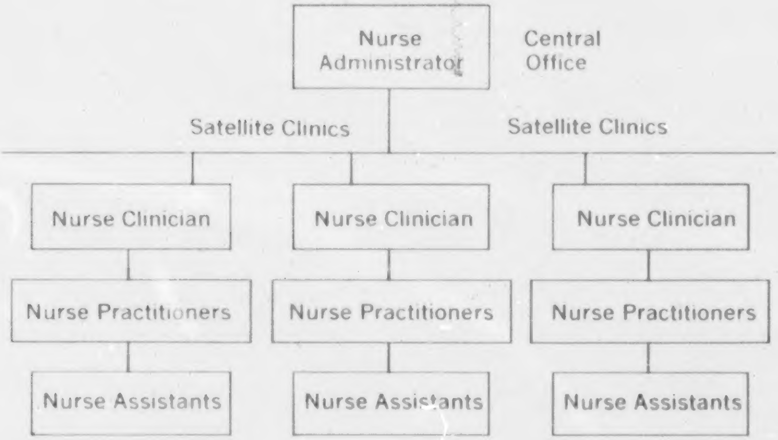
3. Students from each type of program are taught and supervised by nurse clinicians and, in selected instances, by nurse practitioners.

NUMBERS AND KINDS OF NURSES NEEDED FOR IMPLEMENTATION OF IDEAL HEALTH CARE DELIVERY SYSTEMS

Total All Levels: 300 per 100,000 population
Levels By Per Cent:

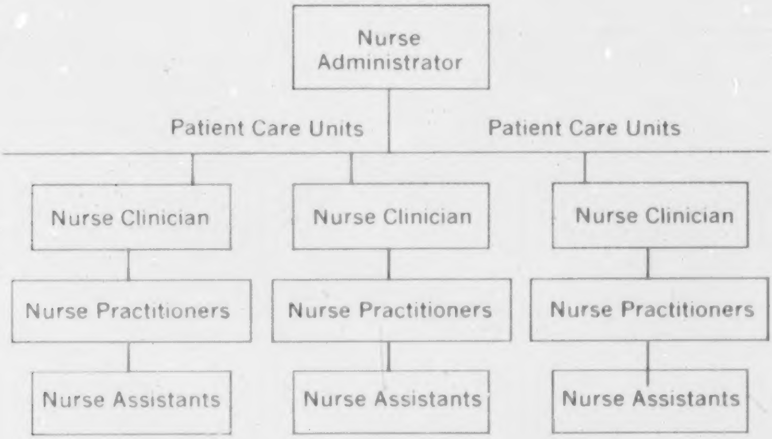
Nurse administrators	5
Health maintenance clinicians	15
Health restoration clinicians	15
Nurse practitioners	35
Nurse assistants	30
	100

STAFFING OF HEALTH MAINTENANCE AGENCIES


Nurse Administrator
Central Office
Satellite Clinics
Satellite Clinics
Nurse Clinician
Nurse Clinician
Nurse Clinician
Nurse Practitioners
Nurse Practitioners
Nurse Practitioners
Nurse Assistants
Nurse Assistants
Nurse Assistants

The nurse clinicians in these settings are generalists or family and community health nurses.

STAFFING OF HEALTH RESTORATION AGENCIES


Nurse Administrator
Patient Care Units
Patient Care Units
Nurse Clinician
Nurse Clinician
Nurse Clinician
Nurse Practitioners
Nurse Practitioners
Nurse Practitioners
Nurse Assistants
Nurse Assistants
Nurse Assistants

The nurse clinicians in these settings are specialists according to settings—acute, intermediate, long-term.

REFERENCES

Dubos, René. *Man adapting*. New Haven: Yale, 1965.

Dunn, Halpert. High level wellness for man and society. *American Journal of Public Health*, June 1959.

Menninger, Karl. *The vital balance*. New York: Viking, 1965.

An Option for Future Nurses: Coordination of Care

WALTON CONNELLY

Nursing literature is replete with expression of dissatisfaction with the present state of affairs. Several of the factors which lead to this sense of dissatisfaction are the lack of professional status, the lack of consensus related to types of nurses and nursing training, plus a profound uncertainty about the direction and the future of nursing in the health care delivery system. The problems creating these issues are complex and elusive. At present, most of the proposed options for changing the situation are fragmented and underdeveloped.

The first six sections of this paper specify selected problems both within and beyond the profession of nursing that form the basis for one of the more viable options for the nurse of the future—the nurse as care coordinator—which is described in the final section.

THE COMPLEXITY OF THE HEALTH SYSTEM AND THE LACK OF DEFINITION OF NURSING

Regardless of what one may say about the health care delivery system in this country, all would agree that the system is complex. Its complexity stems from the combination of at least three sets of forces: the diversity of need, the diversity of diagnostic and treatment technology, and the financial profit gained in our society by meeting these needs through available technology. Because of these forces, the health care delivery system has grown like "Topsy." In this "Topsy" pattern of growth, the position of a nurse has perhaps suffered more than most health occupations. The functions of nursing have proliferated into so many roles that it has become virtually impossible for nursing to define rationally or organizationally all of the functions. The question "What is a nurse?" is, in fact, inaccurate. The question should be: "What are a nurse?" The situation has lead to a serious lack of consensus. This lack of consensus has permitted a degree or diploma to make anyone a nurse regardless of specific functions.

However, to the patients and clients it is the white uniform, not a degree or license, that makes the nurse. For example, when a hospitalized patient turns on a call light, his request is usually satisfied by the response of someone in a white uniform. More than likely, the patient feels that a nurse has responded, even if his needs have been met by a uniformed aide. It is obvious that the specific place of the nurse in the overall health system is unclear to the laymen, and perhaps even to health professionals and nurses themselves.

To be sure, the nurse does exist, primarily by training, not by a clear specification of functions. The result is a growing gap between the training of the nurse and the diversity of types of functions performed by the nurse. Until functions can be clarified within the framework of the overall system, the place of the nurse and indeed the definition of a nurse will remain ambiguous, dysfunctional, and frustrating.

THE DYSFUNCTIONALITY OF IDEALISM

Obviously, idealism is critical in goal-setting and the establishment of directions for change. However, nursing, already spread very thin functionally, seeks to attain even more distant frontiers. The idealism expressed in "treating the whole person," "patient education," "individualized care plans," etc., only serves to complicate the roles of nursing in the employment situation, which in the South has too few persons available in the work force who have received certification for nursing education. In addition to the extremely broad spread of functions now being served by the nurse, many nurses seek—idealistically—to be all things to all patients. This idealism tends to produce overworked nurses and perhaps undercared-for patients.

THE AUTHORITY PATTERN IN THE HEALTH CARE SYSTEM HAS TO BE FACED

Legally and in practice, the physician has the authority to determine diagnoses and treatments in the health care system. All other personnel are in a secondary, non-authority position to the physician. In short, all health care personnel other than the physician are in a service role—including the nurse. It is likely, because of the authority structure, that changes in nursing can only take place through tacit or overt sanctions of physicians. Changes in nursing will inevitably demand an articulation with the profession of medicine. This type of articulation is difficult to develop except between an individual nurse and an individual physician. The difficulty of communication with those in authority has fostered the development of nursing as a self-referenced, closed system rather than an open system which relates to a variety of health care personnel, the patient, and the needs of society. This non-authority position has also encouraged a mythical image of what a nurse actually does which discourages objective analysis.

A BRIEF DESCRIPTION OF THE CLOSED SYSTEM WHICH NURSING HAS DEVELOPED

The lack of function, the non-authority position, and the lack of consensual goals has caused nursing to overdevelop skills of denial and defense. A result of these reaction patterns has been a so-called professional feeling that only nurses understand nursing. The tendency is, therefore, for nurses to communicate mostly among themselves. When negative data comes in from beyond the profession, there is a natural reaction of denial often followed by an attempt to discredit the source. This type of defensiveness creates a climate which fosters passive aggressive responses rather than problem-solving responses. Taken as a whole, nursing is a classic example of a closed-system approach in which the basic thrust is defense designed to protect the existing system. This is of course in contrast to an open system, which exists for the purpose of coping with facts, problems, and situations that emerge both within and without the profession. Given the pace of technological change in our society and especially in the health care field, the future of most closed systems within [illegible] health field is in great doubt.

In order for nursing to become an open system, the profession must develop a different response set as well as a broad array of sets of skills which exist now mostly beyond the profession. Among these sets of skills are analysis skills, problem-solving skills, management skills, skills in systems development, educational skills, research skills, political skills, and risk-taking skills. Obviously, all of these sets of skills cannot be developed in a four- or five-year educational program. The profession must develop ways to reward these sets of skills so that a career life-time can be spent in developing and practicing these skills. Also, a division of skills within the profession must become acceptable so that there are legitimate places within the profession for the needed variety of skills. Certainly the criteria for success and status in nursing needs to be far broader than simply the knowledge and skills of nursing.

THE GROWING ALLIED HEALTH PROFESSIONS

At present, the most obvious characteristic of the nation's health care system is the struggle for power and control. Governments, physicians, communities, and clients are all in the act. The future shape of the system is presently very unclear. The one fact that is clear is that changes are taking place and that even greater changes will take place in the future. The best prediction is that an expanded system will emerge, structured in a way that costs will be shared and that costs for a given service will be reduced. However, the total cost of health care will probably increase because of the growth of services through expanding health technologies.

If this type of outcome does occur, it is inevitable that many more roles will develop in the health care system than even the large number of roles that exist at present. A clear sign pointing in this direction is the rapid and effective emergence of the so-called allied health professions. Growing out of advances in preventive, diagnostic, and treatment technologies, these professions are aiding the physician in providing care and treatment without seriously threatening the position of the physician. Moreover, the political skills of many of these professions will probably insure them of a permanent place in the system. The inevitable result is that the overextended roles of nursing are and will be threatened and reduced.

COST OF NURSING CARE AND THE ALLIED HEALTH PROFESSIONS

On the basis of cost, it is questionable if the future health care system will permit the nurse to continue to carry out hotel functions, even if the nurse is dealing with the mental health of the patient at the same time. The cost will simply be prohibitive. The training of the nurse to be effective in all of the presently identified roles plus potential future roles will make it impossible for the nurse student to afford the type of education she will need. Moreover, the future system cannot pay for overtrained personnel performing functions which can be done by persons with less training.

It would probably be more effective—although perhaps not cheaper—if the hotel functions and other similar functions were performed by less expensive personnel. Mental health, patient education, and other functions might well be assigned to new allied health professions.

Even at present, the technologies represented by the allied health professions are too complex for the nurse to become proficient in all of them. Once again this situation places the nurse in a "no-win" position which presents a growing threat to the profession.

To be sure, the erratic distribution of health care personnel throughout the South and the country as a whole will force some nurses to be all things to some patients—including being the physician. However, the development of the roles of nursing in the future cannot be patterned on these exceptions. The future place of nursing in the health care system must allow for these conditions, but not be shaped by them. The future health care system will be, to a large extent, based on the expansion of health technologies. And the responsibility for many, if not most of these technologies will be placed in the hands of the allied health professions.

A RECOMMENDATION FOR THE FUTURE PLACE OF NURSING IN THE HEALTH CARE SYSTEM

The one major group that is being omitted from the current discussion of the future of the health care system is nursing. This is perhaps a psychological reaction of persons in authority to the seemingly closed system which nursing projects. Most of the key figures in the present national debate are acting as if nursing is not in the system. And on the whole, nursing is acting as if the debate does not exist. Issues currently being discussed by nurses such as continuing education, types of training, certification, and regulations remain within the profession. This is a dangerous situation which could lead to poor decision-making. The entire society could suffer negative consequences. To avoid these consequences, nursing has the opportunity now to respond to the situation which is external to the profession. In short, the opportunity is right for nursing to respond as an open system.

The emerging health care system will include, because of growing technologies, more roles and functions than exist at present. What has not been faced so far in the developing situation is that a coordination role will be needed. The physician wants the authority but not the coordination responsibility. The allied health professions want to apply their individual skills. But at present, the allied health professions are not basically concerned with overall care and treatment. The emerging health care situation has a vacuum of leadership very close to the top. This vacuum must be filled by a care-and-treatment coordinator.

It is conceivable that the nurse of the future could fill this role. To accomplish this, it would be possible for the several levels of existing nursing personnel, such as aides, LPNs, associate degree graduates, diploma graduates, etc., to be considered as allied health professionals—under the direction of the nurse, the coordinator. In point of fact, a career ladder could be established so that the nurse of the future would be at the top of the ladder with only one step remaining—the physician. This arrangement of the system would functionally make the nurse the physician's assistant. Under this arrangement, the desired status of the nursing profession would be attained. Also a place for the products of the existing educational system would be maintained and utilized. The cost of the existing system would at least be more rational. Moreover, the number of nurses required would be greatly reduced. Also, there would be room to expand nursing training programs.

In this proposed care-and-treatment model, the physician would be the coach, the nurse the quarterback, and the allied health professionals the players. The model appears to allow for expanding roles for technologists and for a viable relationship with the physician as well as effective use of available manpower. In short, the nurse would have a definable role within the system which could respond to the patient, health care agencies, society, and advancing medical technologies.

Our Greatest Need

GEORGEEN H. DE CHOW

I find Virginia Henderson's (1964) definition of nursing sufficiently encompassing and descriptive at this point in time. Her definition is as follows:

> The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will, or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible. In addition, she helps the patient to carry out the therapeutic plan initiated by the physician. She also, as a member of the medical (health) team, helps other members as they, in turn, help her to plan and carry out the total program whether it be for the improvement of health, or the recovery from illness, or support in death.
>
> In essence, then, I see nursing as primarily complementing the patient by supplying what he needs in knowledge, will, or strength, to perform his daily activities and also to carry out the treatment prescribed for him by the physician. (p. 62)

This definition sets forth the unique function of the nurse. Since it makes explicit activities contributing to health, it allows for the expanded role we talk about today. It identifies a role in recovery which allows for all of the caring functions in acute and long-term institutions as well as in the community, along with the treatment functions. It refers to death and thus the skills in care which surround the end of life. By including health as well as illness, it deals with the totality of health needs on a continuum from optimum health to critical illness and death. It points out the unique functions of the nurse within this total spectrum.

Within this definition, the activities of nursing are identified as assisting the individual, sick or well, in the performance of those activities contributing to health or its recovery that he would perform unaided if he had the necessary strength, will, or knowledge. This refers, in part, to the large group of technical skills which are part of nursing practice. I subscribe to the idea that the technical skills of nursing, the laying on of hands in whatever way may be necessary for a particular patient, is a very important part of practice. I believe these skills are needed by all practitioners and must be developed to a very high level of skill by these practitioners.

The definition states that the nurse will do these activities in such a way as to help the individual gain independence as rapidly as possible. To accomplish this requires interpersonal skills, knowledge of the teaching-learning process, and knowledge of total community resources in order to provide the patient the opportunity to reach recovery as soon as possible. The definition states that the nurse helps the patient to carry out a therapeutic plan initiated by the physician. This refers to the large group of treatment skills ordered by the physician and carried out by the nurse. The physician has a primary role in diagnosis and treatment with the nurse functioning in this role to a minimal degree at the present time. Even when she does, however, it does not preclude the fact that the physician's most important role is in diagnosis and treatment of illness and the nurse is responsible for carrying out the therapeutic plan initiated by the physician. I believe the above-identified skills are needed to some degree by all who practice nursing and must be developed to a high level of skill by all practitioners.

As I understand this definition, it implies that a variety of practitioners is needed to provide nursing care. Placing health care on a continuum implies that clients will vary in their needs and therefore, their needs may be met by a variety of practitioners. I would propose that we need the following types of practitioners to meet these needs.

To provide guidance and control over the field of practice, I would focus first upon educating the needed number of first-level professional nurses. I see the first professional degree in nursing at the master's level. I do not believe that in today's world it is possible to prepare this person adequately at the baccalaureate level. I think it would be wise to give some thought to making the doctorate the degree for first-level professionals. But perhaps this is for the year 2000. I am convinced that at least a professional master's is a necessity today.

The person prepared in this way would have three years of professional nursing as an upper-division major. The first two years would be broadly based with content and experiences from all of the areas of nursing as we know them today, providing the student with a solid generalized background on which to build. It would provide the professional practitioner with a well-developed set of skills: technical, interpersonal, problem-solving, and the like. Most particularly the program would place much more emphasis on technical skills than many programs do at the present time.

Then, in the third year, the student would choose an area of specialization. One track would be in the community and would focus on an expanded role for the nurse in a variety of community settings. The student might choose nurse midwifery, for example, or the area of community health. The student would focus the entire year on an expanded role of interest to her. She would be prepared at graduation to function confidently and competently as a beginning practitioner in an expanded role in the community.

The second track would be that of clinical specialization. The student would choose an area of clinical practice which might be defined in traditional ways; examples are maternity nursing, pediatric nursing, medical nursing, surgical nursing, or some combination thereof. Many of these areas are being subdivided at the present time. Many new areas are emerging. The student would pursue an area of practice of her choice in depth for the entire year. Following graduation she would function in the acute care setting or the long-term care setting, giving care to groups of patients, or as a clinical supervisor.

The third track would be the track of clinical coordination. This person would prepare herself to function in the acute care or long-term care setting in leadership positions beyond the level of team leader. In other words, she would have a larger span of authority and might start in the role of the person we now know as the head nurse or patient care coordinator. She would be the professional who works effectively in collaboration with the many groups who are part of these settings, who provides leadership and guidance to less well-prepared nursing personnel who are so much a part of these settings.

If nursing is to arrive and survive, we must bring nursing practice under the control of the professional. Therefore, I believe that in all settings, leadership must be given by the professional practitioner who is prepared both academically, experientially, and personally to assume this responsibility. Only in this way can nursing be truly accountable for its own practice. I think it will take some time to achieve this, particularly in terms of the numbers of people who need to be so prepared. But I think we must get on about the business of clarifying and describing the professional practice for which we are responsible and preparing the people needed to give the leadership and guidance to practice. Thus, I see the preparing of a sufficient number of first-level professionals as our greatest need at the moment.

I believe that additional work at the master's level and work at the doctoral level would prepare the people who are needed for administration, education, research, and independent practice. We will come to the time before too long when we will be preparing clinical specialists, as needed, at the doctoral level in far greater numbers than we are today. The continuing expansion of the knowledge base for practice will demand this.

I believe that the functions and skills of nursing have varying degrees of difficulty and complexity ranging from the simplest to the most complex and require the preparation of registered nurses in technical programs as well as professional programs. This was the message of the ANA Position Paper (1965). I believe that the registered nurse prepared in a technical program has a high degree of technical skill, that she exercises independent judgment in caring for patients with common recurring nursing problems and is prepared to function in team leadership positions. I believe this person's functions are circumscribed in nature and are carried out most effectively in health care institutions where there is recourse to assistance when support is needed. I think it would be possible for the professional nurse to function in this role if she so chooses, but that it would not be wise for her to do so. I do not see the reverse as being true. I do not believe that the nurse practitioner prepared in a technical program should move on to clinical coordination without additional preparation. I realize that this is happening and must in the forseeable future because we lack prepared professionals. I do not think it is a desirable state of affairs, for I do not believe that the nurse with this preparation has the skill and the knowledge base with which to function in the expanded role, in the clinical coordinating role, or in the clinical specialist role, and she cannot develop this skill and knowledge base from experience alone. There is an educational component, academic preparation, that is necessary for these roles along with the experiential component.

I believe that the registered nurse who has graduated from a technical program can function in many very highly specialized areas such as the intensive care units. She can function in circumscribed roles in the community. In both instances, however, the professional is needed to provide leadership, if quality care is to be available. This leadership is not available as needed at the present time. I would design a situation for the future where the leadership and guidance for the field comes only from the professional and is not left to a person prepared at the technical level.

I see the registered nurse prepared in a technical program working in all settings after an initial period of experience in the acute-care setting or long-term setting immediately following graduation. I see this nurse as having an equally independent role in practice in the acute-care setting, the long-term care setting, and the community setting. In all instances, however, I would see her practice under the guidance of the professional practitioner.

I believe the assistants in nursing can be educated as they are at the present time (in vocational-technical schools) for the forseeable future. I think there is a definite role for the licensed practical nurse, who will provide care under the direction of registered nurses. This person can care for less critically ill patients and, with assistance, for critically ill patients. This person has a group of technical skills she has learned well. She can plan care for patients who are moderately ill and can carry out this plan of care effectively after the initial assessment and on-going validation of the plan is provided by either the technical or professional nurse. The nurse aide can care for people who have minimal nursing care needs.

In the future, as care becomes increasingly complex in acute-care settings, I would gradually remove the nurse aide from this setting and replace her with the LPN. The aide may continue to function in community settings but should be phased out of the acute-care setting in great part.

With the publication of the ANA position paper, we established the fact that we prepare for different kinds of practice. As I see the field at the present time, our most important task is to describe the role of the professional practitioner and prepare enough of these people with the skills that are needed to bring order to the field, to assure quality care, and to assume responsibility for nursing practice. This I see as the most important task for nursing in the remainder of this century.

REFERENCES

American Nurses' Association. American Nurses' Association first position on education for nursing. *American Journal of Nursing,* December 1965.

Henderson, Virginia. The nature of nursing. *American Journal of Nursing,* August 1964.

The Future of Nursing

SHIRLEY J. THOMPSON

Il n'y a que le provisoire que dure.
(Only that which is temporary endures.)
—from a French Proverb

The ultimate goal of the curriculum project, as I interpret it, is to suggest some alternative images of the future of nursing and nursing education that will assist us in planning nursing curricula today. The initial task is that of describing, in general, the kinds of expertise required of nurses in the future.

This paper is an attempt to make explicit some of my assumptions about nursing tomorrow. I will borrow heavily from some of the visions of past and present leaders in nursing and specify some of the past changes in society on which these assumptions are based. In so doing, I acknowledge the belief expressed by Dubos (1968, p. 238), "creating a desirable future demands more than foresight; it requires vision," but recognize that the past provides much of the living material out of which we must build the future.

FORCES SHAPING THE FUTURE OF HEALTH CARE

First, I will summarize some of the major forces influencing future developments in the health care system. This listing is not exhaustive; the forces described are not ranked in order of importance since they are obviously interactive in nature; and the categories are not mutually exclusive.

Changes in the Nature and Patterns of Health and Disease

Different types of diseases have replaced each other as central health problems as our technological society has developed and most probably will continue to do so. Historically we note that the major infectious diseases of the industrial revolution were replaced by major nutritional syndromes, which were replaced in turn by diseases of childhood and early infancy. Between the two world wars there was an extraordinary increase in the occurrence of peptic ulcer. This in turn, was replaced by our modern epidemics of chronic, degenerative diseases.

In these changes in the patterns of disease are evident significant features which will dictate some of the needs of tomorrow's health services for the young of today and suggest a different set of needs for the unborn. Current diseases are insidious, are of complex and nonspecific etiology, and produce multiple manifestations that interfere with life functions (physical, psychological, social) over long periods of time. Such diseases are suspected of being the result of one or many environmental insults happening at the right time—perhaps very early in life—to people with certain vulnerable characteristics or undergoing certain vulnerable experiences. Preventing the submerged potential illness in the population is already a major challenge in the health arena.

Changes in Society's Level of Recognition of Health and Demand for Health as a Human Right

The preamble of the Constitution of the World Health Organization (Goodman, 1971, p. 186), written a quarter-century ago, set forth the assertion that health is a human right and not a privilege dependent on particular status or resources. Although this concept that health is an inalienable right and that man has a right to decide on personal and community health matters that affect him is rapidly becoming incorporated into our philosophy, political and professional remodeling of the health system have not resulted in the realization of this goal.

Martha Rogers (1964, p. 2) and others continue to say that "there is increasing cognizance that a society which concentrates its health services on the sick will never be a healthy society." There appears to be a renewed interest in the development of a holistic approach to health and in discovering means of operationalizing the concept in the delivery of health care services. A trend toward focusing with equal emphasis on health maintenance, health promotion, and health restoration is emerging in service agencies. Loretta Ford (1968) suggests that today's dramatic arena of *illness* care soon will be replaced by an equally dramatic arena of *high-level wellness* care where nursing has the potential to lift the sights of individuals, families, and communities in zeroing in on the target of wellness. The adaptive power within the human organism is central to the broad concept that health is a dynamic state fairly free of discomfort and pain, which permits the person concerned to function as effectively as long as possible in the environment where chance or choice has placed him. A health system which recognizes the human organism as an open system, which recognizes the importance of the environment, which recognizes the individual differences in capacities of human beings to adapt at different points along the life continuum, and which recognizes man's ability to control illness and promote health through the exercise of individual responsibility will offer innumerable opportunities and provide new dimensions to nursing in the immediate and distant future.

Changes in the Economic, Social, Situational, and Biological Environments of Man

"Environmental and social changes will in the future create new problems of disease, just as they have in the past. Man will have to learn to outwit his genetic endowment by modifying his ways of life . . . " (Dubos, 1965, p. 252). Changes in the human environment have been enumerated frequently and in multiple ways. Weinerman (1965) describes the most crucial environmental factors that will influence health in the immediate future as aggregation, aging of the population, affluence, automation, additives, addiction, alienation, and anti-pathy (morbid prejudice). This classification can be envisioned to include everything from air pollution and war to highly desirable technological and social innovations. It is becoming increasingly apparent that all forces impinging upon man have the potential for influencing what we now call his "health." Our technological and social innovations have effects which are not recognized for many years, and may become apparent only in following generations. Rene Dubos (1965) and others have written extensively on aspects of environmental science which illustrate how man's responses to environmental stimuli may be conditioned either by the history of the species and of the group or by the individual's own characteristics.

Change and the Pace of Change

The rate of change is accelerating to the extent that the loss of pattern, stability, and continuity to everyday life is testing the adaptive range of individuals. Bodily and psychological reactions to change—signs of being keyed up too much—are resulting in demands for new and different health services. The theory of the adaptive range suggests that some level of change is as vital to health as too much change is demanding. The challenge of the future is to manage change. To manage change we must learn to anticipate it. Dr. Fuller maintains, as a result of his experiments on the impact of experiential deprivation and overload, that some people achieve a certain sense of serenity in the midst of turmoil because they have found ways to get just the right amount of change in their lives (Toffler, 1970, p. 339). Toffler (1970) expresses the belief that while individuals can take steps to reduce the impact of change on their personal lives, the real problem lies outside the individual. Social strategies are necessary to create an environment in which change enlivens and enriches the individual, thereby moving him toward a higher level of wellness.

CHARACTERISTICS OF NURSING IN THE FUTURE

In response to a changing society, nursing in the future may be characterized along the following dimensions:

Life-Time Contributions to the Individual's and to Society's Total State of Well-Being

The emphasis of nursing will be on the outcomes (momentary and life-long) or relevancy of care on individuals and populations. The nurse will be less concerned with the number of tasks performed and more concerned with the efforts of nursing behaviors on people. The nurse will not only help individuals with their present emergency health problems, but will engage in activities to extend their sights for future wellness and in assessment of their potential coping mechanisms. The nurse will continue to be concerned with personal habits and behaviors of people as they affect health. In addition, the nurse will be concerned with policy-making and design of the health care delivery system.

A Dramatic Arena of Wellness Care

The emphasis of nursing on wellness care will extend beyond today's focus of health prevention, maintenance, and promotion relative to specific illnesses into a more concerted study of the adaptive ranges of man in a world of change. Nurses will identify, observe, and measure characteristic behaviors of the individual which are expressions of high-level wellness. Nurses will recognize and influence "coping" controls in the internal and external environment of individuals based on changeable and unchangeable aspects of man's nature. The care, education, and diagnosis and treatment roles of health professionals will be less differentiated in a system focusing on general wellness than in the illness-oriented system of today.

Service Organized Along Competency or Output Lines Rather Than Administrative Lines and Disease Categories

Nurses will be associated with clients and professional teams, not institutions or agencies as we know them today. Clients will enter the system one time only—before birth. Professional teams in partnership with clients will be responsible for *continuous* service to their clients. Most of the health services will be provided outside of institutions. Hospitals or acute-care settings will require many highly skilled and technically oriented care-givers (some may be nurses) and a few managers of care (many may be nurses).

Role definition will be flexible and will lack the artificial division between work and professionalism. Nurses may choose to develop skills and knowledge for application at the population level or the individual client level. The computer age will allow nursing technologies to be developed and taught efficiently, updated with ease and discarded when indicated. Many aspects of bedside nursing today will be highly standardized and routinized. Nurses and other workers will be able to learn technical skills as they need them for practice.

Close Coordination of Education, Research, and Practice

Researchers, educators, and practitioners will be associated as team members serving defined groups of people. Nurse researchers will be concerned with generating verified knowledge for use with people—clinical in the sense of "person-side" rather than "bedside." The focus of research will be on the interaction of multiple variables on and within the individual influencing his adaptive capacity and his potential for wellness. Practitioners and researchers concerned with wellness will strive to determine beforehand the risks involved in social and technical changes in the human environment in order to respond to the question: What is required of the individual in order to accomplish the anticipated change while staying well? Danger signals that individuals and small groups are reaching their adaptive potential will be more clearly delineated and used in determining the services needed.

Nurses as Colleague Members of Comprehensive Health Care Teams

Nurses may serve on one or many teams in one or more functional roles (such as teaching, service, research, management) depending upon their competencies. The skills of all professional team members will be highly visible and service rendered evaluated by its quality as received by the client and the results relative to the anticipated outcomes. Levels of nursing will be defined by the variety and complexity of competencies of the practitioners, which may not fit any of the current educational levels or groupings of behaviors.

A PROPOSED COMPETENCY SCHEME FOR DIFFERENTIATING LEVELS OF NURSING PRACTICE

A scheme similar to the one proposed by Cleland (1972) for categorizing clinical nursing positions may help to define more specific kinds of expertise needed by nurses in the future. Viewing some of the major competencies on a continuum, a nurse would be considered functioning at a high level if most of the competencies she used were within the range considered to be high. An alternative means of defining high-level practice would be to specify a list of competencies in the high range which when demonstrated in combination represents a high level of practice.

Some of the major competency dimensions may be described in the following manner.

MAJOR COMPETENCY DIMENSIONS

	BEGINNING LEVEL	INTERMEDIATE	HIGH LEVEL
I. Decision-making and knowledge base			
1. Decision-making power:	low	medium	high
2. Effective decisions when range of cues needed and utilized are:	narrow and confined	more extensive	broad
3. Effective decisions when knowledge base utilized is:	narrow and highly specialized	concentrated	broad and non-specific
4. Decisions relevant for:	crisis situations (momentary relevancy)	confined, non-crisis situations (short-term relevancy)	long periods of time (life-time relevancy)
5. Decisions relevant at:	individual client level	small group	policy-making level
6. Decisions made:	dependent on other professionals	independent of others	interdependent
7. Physical, social, and emotional assessment of individuals for:	crisis needs	high-risk needs	wellness or adaptive potential
8. Physical, social, and emotional assessment of groups for:	crisis needs	high-risk needs	wellness or adaptive potential
9. Health care priorities set with:	individuals	family or small groups	communities
II. Intervention or change			
1. Interpersonal competencies:	low	medium	high
2. Interventions for purpose of:	sustaining life	stress relief	increasing wellness
3. Intervention when range of alternative nurse actions are:	narrow	fairly broad	very broad
4. Individuals aided in coping with situations by:	providing controls	sharing controls	teaching for the individual's control

BEGINNING LEVEL	INTERMEDIATE	HIGH LEVEL
5. Individuals aided in developing coping controls:		
for self	for self in relation to significant others	with societal groups in relation to external environment
6. Continuity of services insured for small groups of individuals:		
in fairly stable situations	undergoing minor changes	undergoing major change
III. Time		
1. Concern for the comfort and health of people on:		
immediate basis	defined life situation basis	sustaining basis for the life condition of people
2. Service perceived and provided to clients on:		
short-term (crisis) basis	through a period of years	over the lifetime of client
IV. Space focus		
1. Accountable for:		
a limited number of individual clients	small groups and/or families	large groups and/or communities
2. Accountable for individuals and/or groups:		
in stable life situations	in minor change situations	undergoing major change in life situations
V. Information exchange		
1. Information shared with:		
other nurses	other team members	other health teams
2. Information to other team members:		
provided with deference	provided without deference	exchanged in collegial manner
3. Working knowledge of health care system encompasses:		
very limited area	relatively confined area	entire health care system

Cleland (1972) suggests that it would be unwise to try to change everything in nursing. Instead of total reorganization, nursing should organize itself so as to be as compatible as possible with the powerful societal and economic forces to which it properly can accommodate. Continual remodeling and tinkering with the system has not resulted in goals envisioned in nursing in the past. The challenge is to identify the critical points and appropriate strategies for changes in nursing which will place nursing in a meaningful relationship with other professionals and with consumers in the health care system. Ruth Freeman (1972) makes explicit the need recognized by most nurses: "Changes in nursing practice must be engineered in the context of practice in all of the health professions; changes in any one of the professional practice fields will inevitably have an effect on all of them."

REFERENCES

Cleland, Virginia. Nurse clinicians and nurse specialists: An overview. In *Three challenges to the nursing profession*. Kansas City: ANA, 1972.

Dubos, René. *Man adapting*. New Haven: Yale University Press, 1965.

Dubos, René. *So human an animal*. New York: Charles Scribner's Sons, 1968.

Freeman, Ruth. The expanding role of nursing: Some implications. *International Nursing Review*, 1972, 19: 351-360.

Ford, Loretta C. High-level wellness: Paradox and potential in nursing. Paper presented at the Minnesota League for Nursing Convention, Rochester, Minnesota, April 25, 1968.

Goodman, Neville M. *International health organizations and their work*. Edinburge: Churchill Livingstone, 1971.

Paulsen, Virginia. The Nursing Role in the Health Care System. Paper presented at the first meeting of the SREB Nursing Curriculum Project in Atlanta, Georgia, March 8, 1973. (See above, pp. 42ff.)

Rogers, Martha E. *Reveille in nursing*. Philadelphia: F. A. Davis, 1964.

Rogers, Martha E. Nursing: To be or not to be? *Nursing Outlook*, 1972, 20: 42-46.

Toffler, Alvin. *Future shock*. New York: Random House, 1970.

Torrey, E. Fuller. Mental health services: How relevant for urban Mexican Americans? *Stanford M.D.*, 1970, 9: 2-7.

Weinerman, Richard E. Anchor points underlying the planning for tomorrow's health care. *Bulletin of The New York Academy of Medicine*, 1965, 41: 1213-1236.

Lysaught, Jerome P. *An abstract for action*. Report of the National Commission for the Study of Nursing and Nursing Education. New York: McGraw Hill, 1970.

Extending the scope of nursing practice: A report of the Secretary's Committee to Study Extended Roles for Nurses. Washington, D. C.: Government Printing Office, November 1972. DHEW Publication No. (HSM) 73-2037.

Selected Excerpts from Other Position Papers

HEALTH

"Haven't we as nurses been involved in meeting the health needs of society?" My response to this is a decisive "No." Generally, we have focused on illness—for a few people, not all of society—and denied that society has health needs.

—SHIRLEY F. BURD

Health care for the non-sick is derived from the concept that life and its involvement with struggles, failures, sufferings, and successes produce certain responses. The responses, individual in nature, call for coping-adjustment behaviors which do not necessarily fall into the diagnosed-illness category. This [writer] therefore takes the position that man in his association with others is subjected to and reacts to such stimuli in a unique way. Thus, health is a dynamic state and is represented by continuous adaptation of the individual . . . to factors surrounding him. Health is a way of functioning and adapting to the environment, both external and internal; . . . health workers . . . can help man develop and put to use his capacities to maintain a state of equilibrium. The emphasis is on developing health workers who are prepared to prevent human suffering and hold back disruptive physiological and emotional states. This health worker joins the individual(s) in maintaining health.

—MYRTIS J. SNOWDEN

Preventive medicine is just as important for the primary nuclear family as it is for . . . the affected individual. . . . It has been found that the affected member in a family disrupts the other members. . . . Emphasis should be placed on high-level wellness for those individual family members who are not affected and to assist these members to maintain and sustain their state of homeostasis. In turn, they also participate in helping the affected member to achieve a state of homeostasis so that he, too, can share his maximum level of wellness.

—ROSEMARY HENRION

HEALTH CARE DELIVERY

Our population density will increase, as will the demands created by chronic illnesses and problems of the aged. Although hospitalized populations will be more acutely ill, the focus of power within the health care system will move toward ambulatory settings. Increasingly, our health care system will reflect the implications of our newly articulated belief: health care is the right of each individual.

Because of the changing nature of health problems and financial and organizational pressures, prevention and health maintenance will be high-priority items. Emphasis on prevention will stimulate greater concern for control and elimination of non-medical deterrents to health, such as stress, negative health behavior, pollution, etc. Greater responsibility for health and for the health of his community by the individual will be developed. Health care increasingly will be family-centered, responsive to the entire spectrum of health needs, and conceived and implemented collaboratively by many professions. Advancing technology will make possible record systems involving numerous agencies and facilities, thereby permitting comprehensive care. Finally, some legally defined minimum quantity of health care will be equally available to the entire population.

—KAY B. PARTRIDGE

Health professionals, consumers, and government officials at all levels recognize that we are in the midst of a period of change. . . . The essence of the change is from a health care delivery system that emphasizes medical care to one which will emphasize health care. Medical care can be defined as curative care dealing with acute, episodic illness and is concentrated in the hospital setting. Health care can be defined as placing emphasis on prevention, health maintenance, patient education, health behavior, and ability to enjoy life (as opposed to disability), and is concentrated in the ambulatory setting. Medical, curative care is a physician-dominated system, while health care is a system oriented to the health care team. The advent of the latter system has demanded a significant role redefinition for nursing which, in turn, has necessitated curricular change.

—RACHEL Z. BOOTH

. . . the degree of success of any proposal for health care will depend upon an educated public. Provisions for education will have to become a vital component of any health care system in the future.

—MARIE PIEKARSKI

The last few years have witnessed a proliferation of new health manpower roles. In most cases these roles are remedies directed at symptoms and they have not begun to solve the problems of our ailing health care delivery system. A proliferation of remedies is often evidence that yet a cure has not been found.

—EDITH WRIGHT

In tomorrow's world, we will undoubtedly have some form of national health insurance, and it seems likely that national health care of an intensive and community nature will evolve. . . . More attention will be paid to the social factors that contribute to the causation of illness. Environmental factors of housing, nutrition, education, population, stress, and noise will all come under closer scrutiny and scientific assessment.

—MARY RERES

Within the past quarter-century, we have witnessed a dramatic rise in the number of hospitals and in the availability of hospital services. The blurred distinctions between ambulatory services and hospital services tolerable prior to World War II are giving way under economic pressures to legislative definition (particularly as the federal government assumes increasing third-party responsibility). It seems reasonable to expect the present trend toward polarization to continue, with the likelihood of even greater definition of services into categories such as "requiring hospitalization," "hospitalization acceptable," "hospitalization unnecessary"—with reimbursement implications. "Standards of acceptable care," presently being articulated for utilization and evaluation studies from which policy will be generated, will result, I believe, in widespread reliance on "protocol" care; as this proceeds, concerned educators will continue to recognize the paradox that, while high-level (dare I say "professional"?) judgment will continue to be valued, the initiative to exercise that judgment in the face of established procedure will be risky and therefore not actively encouraged.

—KENNETH ROBERTS

The present health care system is full of dead-end jobs where people are locked in by an antiquated system of credentials.

—NANCY STRAND

NURSING PRACTICE

Nursing as an essential social service must be organized to meet society's needs. As the society and its health care needs change, the functional social services must undergo structural change in order to efficiently meet the needs of the social system. To maintain a static stance at a time of predictable social change is to gamble with probable extinction. This is the position I see nursing experiencing today.

—MARY RERES

Clinical nursing practice, we say, means that the nurse meets the patients' physical and psychosocial needs. In a broad sense, this task includes observation and interpretation of the patient's condition and the practice of preventive and restorative nursing; it means appreciating the interrelationships between physical responses and emotional status; it means respecting individual differences and determining what these differences are; it means teaching the patient and family at their level of understanding and at the appropriate time for effective assimilation. In these areas of practice, the nurse can function independently, using her own judgment and skill.

In the dependent area she performs therapeutic measures prescribed by the physician and assists him in other medical procedures in which she must exercise precise interpretive and judgmental abilities in order to fulfill her legal and professional responsibilities. This means that the nurse pinpoints patient problems, obtains knowledge from other sources, surveys the physical and human resources available, and decides on the appropriate course of action. She does this on the basis of her knowledge of nursing principles, the nursing diagnosis, and the physician's plan of therapy. In addition, she coordinates her work with other health and social workers in the community.

—VIRGINIA C. PHILLIPS

What is optimal nursing practice? To achieve optimal nursing practice implies optimal functioning of health care services and optimal functioning of the practitioners within those services. Nursing practice cannot be separated from the system in which it operates, nor from the individuals whose activity creates this practice discipline.

—GAYE W. POTEET

It is my opinion that registered nurses should be free of all non-nursing functions and under the direction of a clinical specialist (who is also free of non-nursing functions); together they would have the responsibility of rendering all direct patient care—whether it is in the primary or secondary setting. I would propose that provision be made to upgrade practical nurses to registered nurses through challenge examinations—theoretical and practical. I would further propose that the individual now recognized as the nurses' aide or nursing assistant be given the title of utility aide and that her function encompass only those of a non-nursing nature. A material and resource manager should have the responsibility of conducting the business and supply functions.

—JOY LYNN DOUGLAS

By the 1980's, it has been predicted that 90 per cent of all health care will be delivered in the community, and that hospitals and medical centers will be composed of intensive care units to meet the needs of the critically ill. . . . [But] a look at the departmental constitution of almost any nursing faculty usually shows 50 per cent of those persons in the employ of the medical-surgical nursing department; . . . medical models persist in the academic structure and hiring lines are perpetrated along the role model concept of nursing: hospital caregiver to the bedridden patient. . . . It is frightening to realize that our factories are tooled to produce a product that soon won't be required. . . . The odds for our future are greater against us than those for us, and yet if we are to survive professionally we have no choice but to change, and *that* in a hurry. . . . The practitioners of tomorrow will be divided into two distinct camps: those who work in the community with the essentially well, and those who work with the gravely ill in intensive care settings. Both groups will be both more technically and behaviorally skilled than the professional nurse of today. In fact, in all probability we will no longer refer to the person as "nurse". . . .

—MARY RERES

In one hospital the director disapproved of financing nurses for a practitioner role when there was such a shortage of "bedside" nurses. All attempts to impress him with the quality care resulting from this program failed. Recently his wife was diagnosed as having a rectal malignancy. A practitioner selected Mrs. T. for her careload during her visits for radiation therapy preoperatively. When Mrs. T. was admitted to the hospital, the practitioner stayed with her during the early depressing hours and remained with the family during the long operation. After surgery, the practitioner assisted in the nursing care plan, supported the patient and her family, taught patient, family, and staff and coordinated the total teaching program. On discharge, she saw Mrs. T. each time she returned to the clinic and was available for consultation at any time. After this traumatic experience the director has offered no further comments about the expense of the practitioner program.

—NANCY STRAND

The medical model will be gone, replaced by the levels of health workers geared to meet the social health needs of that level of expertise. A person's level of ability and intelligence or own personal preference will dictate to which level of performance he will settle. National health workers will be established probably in a civil service framework. Expectations of levels of functioning and responsibilities will be defined by the employer: the federal government.

—MARY RERES

One area of expertise needed is a master nurse who recognizes the community as the ultimate health care recipient and who is committed to the ecological approach to health care. Practice within this framework is multidisciplinary. It is comprehensive and encompassing, and is not limited to a specific age or disease group. It is continuous and dynamic rather than episodic and static. . . . The master nurse will need to assume the responsibility to assess and to care for the health needs of the community. She will want to care for *all* the people in the community, not only for those who make their needs felt. . . . The role of the master nurse clinician will be determined by what the individuals, families, and/or community define as desired health outcomes. The master nurse will assist the patient to progress toward the ideal of optimum adaptation to his ecological system. . . . the master nurse clinician will be the health professional best suited to assume the major responsibility for health maintenance activities. . . . the master nurse clinician can relieve some of the pressures [on the health care system] by providing primary health care services to people.

—EDITH WRIGHT

At the present time a nurse clinician may be a clinician in one state, a clinical specialist in another, a practitioner in a third—each with some similarities and some striking differences. In California she may be a baccalaureate-prepared nurse; in Boston, a master's graduate of a two-year program; in Detroit, a master's-prepared health care clinician; in Nashville, a twelve-month master's-prepared graduate; in North Carolina, a graduate of a year's non-degree program. Unless nursing elects to define her roles, some other profession or agency may elect to do so, to clarify the confusion that exists today.

—NANCY STRAND

It is envisioned that the nurse of the future will need to be an expert in the areas of social planning, management, leadership, and decision-making, research design and implementation, administration, education and scholarship in addition to possessing methods and techniques for providing intimate and intricate nursing care. Such expertise would result from advanced educational preparation.

—MYRTIS J. SNOWDEN

The nursing profession will need to assume a more dynamic leadership role if changes in the delivery of nursing services is to take place. No longer can nurses allow the bureaucracy of institutions to dictate what nursing care should be. The needs of people ought to be the determining factor for nursing practice.

—MARIE PIEKARSKI

NURSING EDUCATION

It is easy to dream in isolation and develop concepts and theories that sound very profound and have the appearance of realism but do not stand the test of time when given a trial in a life setting. This is what has happened in nursing and medical education. Education has gradually but very effectively isolated itself from service; nursing and medicine have similarly isolated themselves from each other. No wonder that the education of both is becoming increasingly irrelevant to the problems at hand. . . . In general, the nurse of today is educated in a very protected, artificially contrived idyllic situation, where she is carefully supervised every step of the way lest she or the patient suffer the trauma of making an error. She is given much more knowledge than she is legally permitted to use in most states, told she has a unique function to perform, taught the ideal methods by which to perform it, and then set loose in a society which sees less and less utility for the type of professional that is being developed by present-day educational institutions. She tends to be relatively dependent, ineffective, and frustrated. She has difficulty in finding suitable employment in present health care institutions and seems the least understood of the health professionals.

—MABLE SPELL

Perhaps the greatest dilemma in the provision of adequate nurse manpower for the workforce is the one which has up to now received the least attention: the problem of attrition or drop-out at every level—from educational programs, during the licensure process, and in the workforce at all levels. In *An Abstract for Action* (1970) Lysaught dealt with the problem as that of a stress-satisfaction syndrome. However, studies by Davis and others seem to indicate that the roots of the problem lie in the recruitment and selection processes of educational programs. In any event, the large numbers of inactive nurses and the fact that less than half those prepared by the educational system remain in the workforce leaves one feeling that the relationship of the educational system to manpower need is analogous to the proverbial donkey and the carrot—with the goal beyond reach no matter what the effort. *The matter of attrition from nursing at all levels needs to be carefully studied in terms of its causes and avenues for remedying the situation.* Otherwise, the resources of the educational system for nursing will continue to be not as efficiently and effectively used as the large investment in them warrant.

—GWENDOLINE R. MACDONALD

Recipients of nursing graduates have . . . [been unable] to validate through empirical or other methods of appraisal the differences in levels of performance of associate degree and baccalaureate nurses. This may explain the conflict between educational preparation and agency expectation and orientation. Many physicians in a variety of health settings are unaware of knowledges and skills which today's nurses possess. Unfortunately, nurse educators have not fulfilled their role in effectively communicating with collaborative health personnel. . . . We have persisted in the tendency to group all students together within identical curriculum sequences rather than recognizing individual needs and differing backgrounds. . . .

ROSE L. FOSTER

. . . some or all of the following are potential obstacles . . . effecting change in nursing and nursing education . . .:

1. widespread faculty commitment to tradition and/or the philosophical position of the professional organization;
2. ubiquitousness of traditional values which will be threatened by any proposal which is dissonant with existing policies and procedures;
3. cultural bias, operating in subtle and pervasive ways to maintain exclusivity of the profession;

4. widespread misconceptions about the learning process, e.g., the interpretation of "aptitude" as "ability to learn";

5. widespread controls which perpetrate the selection process, e.g., standardized tests which are culture-biased and may or may not correlate with clinical performance;

6. program approval/accreditation procedures which perpetrate lock-step progression and clock-hour requirements, in the false assumption that these assure the development of competence.

The existence of these obstacles is disheartening but the situation need not be viewed as hopeless.

—MARY ELIZABETH MILLIKEN

The present system of two-, three-, and four-year courses of preparation is unsatisfactory, but attempts at improvement by merely deleting the diploma schools deprives the overall system. A better approach, I believe, is to incorporate the strengths of *all three types* of preparation into a unified system. . . . There is benefit from operating within the framework of education but [I] strongly oppose any separation of nursing service from the curriculum by nursing educators. The strengths of the diploma schools . . . must be identified, strengthened, and incorporated into the academic framework toward the end of producing doing thinkers and thinking doers. This marriage will involve concessions from both camps but recognition of and respect for complementary strengths should result in beneficial "hybrid vigor."

—KENNETH ROBERTS

City planners and systems analysts from all of the social sciences will be needed in the education of the health careerist to aid in his understanding of factors that promote change in the integrity of the individual human system, as well as within groups of humans.

—MARY RERES

Present and future plans call for closer collaboration and joint appointments for nursing faculty and nursing service staffs. Advances in nursing knowledge and practice can only come when evolving theory is seen as relevant to reality situations and can be applied to solving present-day nursing care problems. The service setting provides the learning environment for students and investment by education can raise the level of patient care and assure practitioner role models for students. On the other hand, nursing services are dependent on schools for manpower and can benefit from feeding to teachers the nursing problems they encounter. Such collaboration prepares the students to deal creatively with issues relevant to service settings and patient care.

—NANCY STRAND

Nursing education must treat its case of "credentialitis" and conduct programs which prepare people to function *skillfully* at whatever level up the career ladder they decide to stop. Also, nursing educators must seek, consistently, the input from nursing service personnel and practitioners so that education can be maintained at the optimal relevant level.

—JOY LYNN DOUGLAS

In "core" courses, all nurses would begin on the well, ambulatory person and proceed to chronic disease management, and finally to acute care. The dialectical approach necessitates change in and better correlation of the basic sciences, clinical, and psychosocial course work to provide the birth-to-death and wellness-to-illness continuum. Clinical experiences with the well, ambulatory person would occur in industry, schools, day care centers, business, and health maintenance organizations. A good understanding and learning in this part of the curriculum would then facilitate the student's learning of deviations from the normal. Epidemiology, anatomy and physiology, pathology, psychology, sociology, and, later, diagnosis and treatment would be taught in a problematic, correlative approach. The student would be taught initial physical diagnostic skills throughout the curriculum. Eliciting a meaningful history and patient interviewing would also be emphasized from the very beginning.

—RACHEL Z. BOOTH

Finally, and . . . most important, the nurse should be a collaborator. The word has become part of the nursing vocabulary within the last few years and as such has come to have diverse meanings, from "What are you doing for dinner tonight" to "You take over Mrs. —— for me." Dr. Silver of PNP [pediatric nurse practitioner] fame has gone so far as to suggest nurses change their names to Health Care Practitioners to overcome the feminine and subserviant role still evident in nursing today. Unfortunately, we the nursing educators are responsible for perpetrating the lack of collaboration. The student nurse is asked to make very few decisions which would prepare for the role of collaborator. Yet upon graduation, it is expected the nurse will become a colleague of the other members of the health team.

What does collaboration imply? What can be done to prepare the young student for this role? Collaboration is to jointly authorize action, or to work toward a mutually determined goal. This does not say we must be junior doctors or take over others' functions, but does say we must have substantial data in our own area of nursing and the belief that we have something to contribute.

—ISOBEL THORP

1. All nurses regardless of basic preparation—licensed practical nurses, diploma nursing school graduates, associate degree, baccalaureate, or Ph.D.—need to continue learning throughout their life-times.

2. All nurses should have long-range education goals as well as short-range goals.

3. There is a distinction between continuing education and in-service education. The responsibility for the provision of each rests with educational institutions and health service agencies respectively.

—GEARLEAN N. SLACK

It is essential for undergraduate faculty to imbue the students with the spirit of inquiry and excitement of discovery. Graduate school faculty must bring students to the point where they will want to experiment with the known and want to probe continually for new knowledge in nursing (Hassenpling, 1970). In the United States nurses with research preparation through the doctorate number about 700 and all of them are not found in university nursing education programs. In the next decade, all faculty should be prepared at the doctoral level.

—NANCY STRAND

. . . three questions . . . may be critical to the future of nursing: Can nursing afford to give lip-service to broadened futuristic concepts while perpetuating the traditional policies and procedures?

Can nursing education continue to prepare students for the "relative when" if these students graduate into a work setting characterized as the "positive now"?

Hassenpling, L. "This I Believe—About University Nursing Education." *Nursing Outlook*, 1970, 18:38-40.

Can present nursing education programs survive a cost-effectiveness study, in this day of legislative concern for "accountability"?

The answer to each of these questions in the opinion of this writer is an emphatic "NO!"

—MARY ELIZABETH MILLIKEN

It seems clear that the resources available to nursing education in the South are not being used as effectively and efficiently as they need to be. While there is a real need for additional nurse manpower in the South, *plans for the development of any new educational programs to prepare for entry into the field or for graduate preparation should be assessed very carefully in terms of the alternatives available. Attention should be directed to providing adequate support to strengthen programs already in existence and toward increasing coordinating and collaboration among programs to improve utilization of personnel and resources.*

In coping with maldistribution of nurse manpower, it is essential that consideration be given to alternatives to the establishment of small undersupported programs in underserved areas with inadequate clinical facilities where it is impossible to attract qualified faculty. How can existing programs be strengthened, their productivity improved, and their impact on personnel supply for underserved areas be developed? With increasing competition for the dollars available for education in the health field, the matter of optimum use of all resources available is of paramount importance.

—GWENDOLINE R. MACDONALD

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